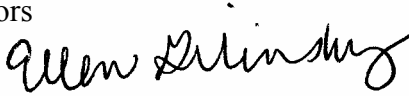


COMMONWEALTH OF VIRGINIA
Department of Environmental Quality
Water Division
Ellen Gilinsky, Ph.D., Director

Subject: Guidance Memo No. 08-2010, Implementation Guidance for Reissuance of the General VPDES Permit for Concrete Products Facilities VAG11

To: Regional Directors

From: Ellen Gilinsky 

Date: June 30, 2008

Copies: Deputy Regional Directors, Regional Water Permit Managers, Regional Water Compliance Managers, Rick Weeks, James Golden, and Fred Cunningham

Summary:

This guidance memo replaces Guidance Memo No. 03-2011 and 03-2011 Amendment 1, the implementation guidance for the reissuance of General Permit VAG11. On April 10, 2008, the State Water Control Board adopted amendments to the General VPDES Permit Regulation for Concrete Products Facilities, 9 VAC 25-193-10 et seq., which modified General Permit VAG11. These modifications are effective June 11, 2008. Copies of the amended permit regulation, fact sheet, modified registration statement, modified general permit and other items are attached. The purpose of this guidance memo is to identify changes that have been made to the General Permit VAG11, to provide DEQ staff with guidance on implementation of these changes and to provide guidance on aspects of the permit that have raised questions.

Electronic Copy:

An electronic copy of this guidance in PDF format is available for staff internally on DEQNET, and for the general public on DEQ's website at <http://www.deq.virginia.gov/waterguidance/permits.html>.

Contact Information:

Please contact Elleanore Daub, Office of Water Permits and Compliance Assistance, at (804) 698-4111 or emdaub@deq.virginia.gov with any questions regarding the application of this guidance.

Disclaimer:

This document is provided as guidance and, as such, sets forth standard operating procedures for the agency. However, it does not mandate any particular method nor does it prohibit any particular method for the analysis of data, establishment of a wasteload allocation, or establishment of a permit limit. If alternative proposals are made, such proposals should be reviewed and accepted or denied based on their technical adequacy and compliance with appropriate laws and regulations.

1. Background

This guidance memo replaces Guidance Memo No. 03-2011 and 03-2011 Amendment 1, the implementation guidance for the reissuance of General Permit VAG11. On April 10, 2008, the State Water Control Board adopted amendments to the General VPDES Permit Regulation for Concrete Products Facilities, 9 VAC 25-193-10 et seq., which amended General Permit VAG11. These changes are effective June 11, 2008. Copies of the amended permit regulation, fact sheet, modified registration statement, modified general permit and other items are attached. The purpose of this guidance memo is to identify changes that have been made to the General Permit VAG11, to provide DEQ staff with guidance on implementation of these changes and to provide guidance on aspects of the permit that have raised questions during the reissuance.

The existing General Permit VAG11 expires on September 30, 2008. All facilities currently permitted under VAG11 must submit a registration statement and appropriate fee to be permitted under the amended general permit. All necessary paperwork is attached to this guidance.

Facilities under SIC Codes 3271 (concrete block and brick) and 3272 (concrete products, except block and brick) and ready-mixed concrete plants (SIC Code 3273) are covered under this general permit. Included in this category are facilities that operate in a 'no discharge' mode. These facilities normally do not discharge except during a 25 year, 24 hour storm event.

2. Changes to the General Permit 2008

In addition to the new effective and expiration, the following are other changes made to the regulation:

- a. In Parts 1.A.1 and 1.A.3 the EPA Methods for total petroleum hydrocarbons are updated. The reference section in the general permit regulation (section 80:2) is also updated.
- b. In special condition 1 in Part I B a requirement for no solids deposition in surface water as a result of the industrial activity in the vicinity of the outfall has been added. Also, that the visual quality of the receiving stream (including observations of solids deposition from the industrial activity) in the vicinity of the outfall (including ditches and conveyances) should be included in the quarterly visual examination reports of the storm water management section (Part II D). These were added in response to staff concerns about solids depositions (concrete product) entering the receiving stream. It is believed that visual examination of these areas will provide a useful and inexpensive means for permittees to evaluate the effectiveness of their storm water pollution prevention plans and make any necessary modifications in housekeeping to address the results of the visual examinations. See additional guidance under #8 below.
- c. Special condition 10 in Part I B is amended such that where basins are operated in a series mode of operation, the one foot freeboard requirement for the upper basins may be waived provided the final basin will maintain the freeboard requirements. This was added to reflect existing practice and design of these basins and to ensure the lower basin will not overflow in high flow rain events. It is

deemed reasonable and protective since the additional treatment provided by series basins is preferred. See additional guidance under #11 below

d. Special condition 13 in Part I B was modified to clarify liner requirements for settling basins built after February 1998 set forth in the Code of Virginia § [62.1-44.15:5.2](#). The existing permit contains liner requirements for process wastewater commingled with storm water and this was clarified to include process water or process water commingled with storm water.

e. Special condition 15 in Part I B was modified to ensure that the permittee reports discharge monitoring at two significant digits. The changes in this section were done to conform to Guidance Memo 06-2016 (Significant Figures for Discharge Monitoring Reports) for consistency within the VPDES program.

3. Coverage and Restrictions

The general permit is applicable to discharges of process wastewater and/or storm water associated with industrial activity from SIC Codes 3271 (concrete block and brick) and 3272 (concrete products, except block and brick) and ready-mixed concrete plants (SIC Code 3273). SIC codes 3271 and 3272 were added in 2006. Included in this category are facilities that operate in a ‘no discharge’ mode. No discharge facilities normally do not discharge except during a 25 year, 24 hour storm event. This is approximately 6 inches in eastern Virginia and 5 inches in western Virginia (see http://hdsc.nws.noaa.gov/hdsc/pfds/orb/va_pfds.html for site specific rainfall information). All concrete products facilities either discharge directly to surface waters or indirectly to surface waters through a MS4.

Although this general permit provides coverage where the majority of the industrial activity is the production of ready-mixed concrete, it also provides coverage to a facility which produces several products but the only wastewater discharge is from the ready-mixed concrete production area. Both permanent and portable plants are included in the definition of “industrial activity” and both could be covered under this general permit. The definition of portable plants does not include rental of a cement mixer for personal use and this activity is not covered under this general permit. It is recommended that DEQ air staff inform the water staff when a portable plant requests an air permit so the water staff can ensure a general permit has been issued for the operation.

For applicants currently holding VPDES/VPA permits as identified in Item 2. C of the registration statement, it is desirable to consolidate the discharge and no-discharge modes of operation into one general permit.

The discharges of process wastewater and/or storm water from the concrete plants are subject to the following restrictions:

- a. The owner has not been required to obtain an individual permit.
- b. No discharges are allowed to any state waters specifically named in other board regulations or policies which prohibit such discharges (e.g. Exceptional Waters in 9VAC25-260-30).

- c. The effluent limitations listed in 9 VAC 25-260-310.m (special standards and requirements for the Chickahominy watershed above Walker's Dam) are intended for wastewater treatment facilities and do not apply to discharges consisting solely of storm water.

4. Registration Statements and Fees

The registration statement form was removed from the regulation in 2003. However, the information required to be submitted on the registration statement was retained in 9 VAC 25-193-60. This approach allows for increased flexibility in formatting registration statements (i.e. eventual on-line registration, etc.) and is consistent with other VPDES general permit regulations. The permittee is not required to use our registration form to apply for coverage under the general permit. However, they must submit all the information required for registration listed in the permit regulation (including the certification). The registration statement and its instructions are included with this guidance as an attachment. The registration statement has changed slightly in 2008 (added optional email addresses and the option for the applicant to receive the permit electronically, added latitude/longitudes of outfalls and clarified in the instructions process water and vehicle / equipment maintenance). Electronic information and latitude/longitudes of outfalls are not specifically required by the regulation and should not be used in determining if the registration form is complete or if the applicant can be covered under the general permit.

The registration forms now posted on DEQNET should be sent out as soon as possible to the existing permit holders so they can reregister and avoid a lapse in coverage. A transmittal letter is included with this guidance. For 2008, we have waived the 180 day deadline for submittal of registration statements so request return of the registrations statements within 30 days of the date on the transmittal letter. Negotiate alternate return dates on a case by case basis as long as they are returned in time to obtain a complete registration statement before the expiration date of the permit.

Who Submits Registration Statements, Fee Forms, and Fees:

- a. Discharges that are currently covered by General Permit VAG11 must submit a registration statement in order to continue coverage under the reissued permit.
- b. Qualifying new discharges must submit a registration statement 30 days prior to commencing discharge in order to obtain coverage under the general permit.
- c. Qualifying facilities currently regulated under an Industrial Storm Water General Permit must submit a registration statement 30 days prior to expiration of the Industrial Storm Water General Permit on July 1, 2009.
- d. Qualifying existing facilities that currently discharge to surface waters or to a MS4 without a permit must submit a registration statement in order to obtain coverage under the general permit.
- e. Qualified facilities that currently discharge process wastewater and/or storm water under an individual VPDES permit can apply for coverage under the general permit but need not apply immediately. It is preferable that such application be timed to coincide with the expiration of the individual permit. These facilities may allow their individual VPDES

permit to expire and apply for the general permit 180 days prior to expiration of the individual permit or have the individual permit voluntarily terminated or revoked and the general permit issued in its place. Because there is no refund for the difference of the application fee between the individual and general VPDES permits when the individual VPDES permit is terminated, most permittees will likely choose to allow the individual permit to expire and then replace it with the general permit. Individual permit coverage should be converted to general permit coverage prior to April 1st of the billing year to avoid having to pay the DEQ Annual Maintenance Fee for that billing year.

Where Do Registration Statements and Fees Get Submitted?

Original signed registration statements must be submitted to the regional office (or a scanned copy of the original via email) with jurisdiction over the locality in which the discharge takes place. A copy of the fee form and a copy of the applicant's check must accompany the registration statement. The original fee form and the check must be submitted to Receipts Control at the DEQ Central Office (see fee form link below). The fee must be paid in full at the time the registration statement is submitted for coverage under the general permit.

As of the date of guidance, the on-line registration capability does not exist.

For CEDS and other purposes, the date of permit application receipt (APRD) should be based on the date the signed registration statement is received.

The fee form to be submitted with the registration statement for coverage under this general permit is no longer included among the attachments of the guidance memo. Always obtain the latest version of Fee Form available on the DEQnet at <http://deqnet/documents/index.asp?path=%2Fdocs%2Fwater%2FWater%5Fpermit/Water%5Ffee%5FForm>

The fee for registration under this general permit is \$600. There is no pro-rating of fees.

5. Issuance of the General Permit

Once it is determined that the registration statement represents a facility that qualifies for coverage, the general permit pages can be prepared. The general permit pages are included with this guidance as an attachment. The cover page printed on agency letterhead, appropriate Part I effluent limits pages, special conditions, and boilerplate should be assembled with the general permit number for the facility entered in the upper right hand corner of the Part I, II, and III pages. Applicable Part I.A pages will be determined by the types of discharge identified in the registration statement. For example, if a facility discharges process wastewater and storm water through separate outfalls and there is no discharge of cooling water through another outfall, only Part I.A.1 and A.3 will be applicable and included in the general permit issued to the facility. Part I.A.2 limits are for cooling water that does not combine with process water or storm water. Some concrete facilities do not have a separate outfall for storm water rather storm water drains from the property and discharges through outfall 001 and it is not commingled with process water. These facilities should be required to do monitoring either as part of the limits and monitoring set forth in Part I.A.1 (process water that may be commingled with storm water). However, if the facility normally has NO DISCHARGE on the

Part 1.A.1 process water DMRs from outfall 001 and they are discharging storm water directly from the site (not commingled with process water) through 001, you must assign a storm water outfall number (e.g. 901) along with its corresponding storm water monitoring requirements to 901 so that storm water monitoring will occur. Permittees should not collect storm water data if they are having a process water discharge at the same time (this would constitute Part 1.A.1 process water that may be commingled with storm water monitoring requirements from 001). This means that physically it is the same outfall, but for CEDS the data is either for 001 (process water commingled with storm water) or 901 (storm water). Permittees can elect to separate the outfalls.

Check page numbering in the upper right hand corner of the permit pages (attachment D) and adjust if necessary. The appropriate outfall number must be added at the end of the first sentence on each effluent limits page. No other changes to the language of the general permit are authorized.

New permit numbers will continue to be assigned by CEDS. Existing permittees will retain the same permit number when they reapply. All permit numbers will begin with the same five characters: VAG11. Please remember that the permit number must be added to the permit pages, including the cover page, before the permit is mailed to the permittee.

The general permit requires monthly, quarterly or annual monitoring and reporting. Therefore, Discharge Monitoring Reports (DMRs) are necessary for reporting and compliance tracking. DMRs should be prepared to reflect the applicable effluent limitations and monitoring requirements for each outfall addressed in Part I A of the permit. An updated DMR should be prepared and be sent to the permittee once a request for reduced monitoring is granted or a reversion of monitoring frequency is necessary as a result of noncompliance. When there is a question about the appropriateness of reduced monitoring, contact central office compliance assistance or inspections staff (see reduced monitoring in #11 below).

Use the appropriate letter to transmit the permit and DMRs to the permittee. It is not necessary to copy the DEQ Office of Water Permit Programs or EPA on individual coverage under a general permit. The transmittal letter for coverage under a general permit does not contain the two paragraphs referencing the owner's right to appeal the decision to cover them under a general permit. The transmittal letter should indicate when DMRs are due and where the DMRs are to be sent.

6. Termination of Coverage and Change of Ownership

If an owner requests termination of coverage under the general permit the regional office can terminate coverage under regional letterhead.

If there is a request for change of ownership, then the new owner assumes the coverage under the general permit and the permit number does not change. The new owner may submit a new registration statement, but it is not required. Part III of the permit allows for automatic transfer of ownership if the 30-day prior notice and the required written agreement between the new and the old owners are provided. The other change of ownership requirements and procedures in the VPDES Permit Regulation and VPDES Permit Manual that are common to all VPDES permits apply to this general permit as well. Any change of status should be noted in CEDS.

7. Compliance Reporting

DMRs are due on the tenth of the following month for monthly reporting; the tenth of January, April, July and October for quarterly reporting; and the tenth of January of each year for annual reporting. Tracking of compliance with the effluent limits and other requirements of the permit should be done according to the Compliance Auditing System already established. Reporting requirements for noncompliance, unusual or extraordinary discharges, etc. are the same as for individual permits.

8. Inspection of Facility Covered

Facilities covered under this general permit are subject to the requirements for the industrial minor/small category of facilities as set forth in DEQ's inspection strategy. As such, they should be inspected at least once every five years. More frequent inspections can help prevent compliance problems and each regional office should consider more frequent inspections as time and resources allow. The inspections should verify proper operation and maintenance of each unit process that include, but are not limited to, freeboard maintenance (see guidance under #11 below) and pH adjustment; waste concrete handling; and implementation of SWP3. Also verify the discharge points, either to MS4s or directly to surface waters. Verify that no solids (including concrete product) have entered surface waters. If applicable, verify type and location of onsite vehicle/equipment maintenance activities, reuse of wastewater for dust suppression, and the presence and chemical usage of geothermal unit. Note if truck washout and washdown is occurring in a designated location for treatment before discharge. Note if oil sheen is present in settling basins or in state waters. Take pictures whenever possible if concerns are noted. The daily inspection log for freeboard maintenance, the O&M Manual, the SWP3, records of routine facility inspections, and the annual site compliance inspection report as required by the SWP3 are subject to DEQ staff inspection. The quarterly visual examination reports (beginning Oct-Dec quarter 2008) must contain notes on the visual quality of the receiving stream (including observations of solids deposition and oil sheen from the industrial activity) in the vicinity of the outfall (including ditches and conveyances). Solids in the receiving stream are a violation of special condition B.1. Inspector information will be reviewed when issuing the 2013 general permit.

The purpose of freeboard requirements is to prevent overflow. In cases where the notches or pipes are located less than one foot from the top of settling basins (and most likely plans and specs have been approved by the Board), the minimum one-foot freeboard requirement may be maintained in the last basin only. Inspector judgment is necessary to determine the critical point in the system such that the intent of the special condition is met. The freeboard measurement and calibration procedures should be included in the O&M Manual. Additional guidance, including an illustration on freeboard measurement is included in # 11 below.

For treatment systems which operate only in a "no discharge" mode, there shall be no discharge of pollutants to surface waters from these systems except in the case of a storm event which is greater than a 25 year-24 hour storm event. In Virginia, this is approximately 6 inches over a 24 hour period.

Frequently during inspection a new outfall is found that was not previously reported. Please see additional guidance on under #11 below.

9. Record Keeping and Audit

Tracking of coverage under this general permit will be in CEDS. It is important that CEDS is kept updated with relevant information pertaining to the general permit, and this information is subject to audit. Database information must include, but is not limited to, facilities registered under the permit, permittees, contact information and permit numbers.

Hard copy files that must be retained and are subject to audit include, but are not limited to, the following:

- a. A copy of the registration statement and information required by the registration statement;
- b. A record of the evaluation of DMRs used to determine eligibility for reduced monitoring for a facility covered under the previous general permit.
- c. A copy of the general permit and DMR(s) sent to the permittee;
- d. Copies of all inspection reports related to the discharge; and
- e. Copies of the request and authorization letter for reduced monitoring and a record of the evaluation of DMRs used to determine its eligibility, if applicable.

10. Monitoring Data Review at Reissuance

Evaluation of collected data will be performed prior to the next round of general permit reissuance. The regional office should ensure that all relevant monitoring records are maintained and data entered into CEDS. The DMR data and any proposed limitations as a result of such evaluation should be brought to the Technical Advisory Committee for its consideration.

11. General Permit Limits and Special Conditions Guidance

Reduced Monitoring Part I.A.1.footnote 6 and I.A.2 footnote 4

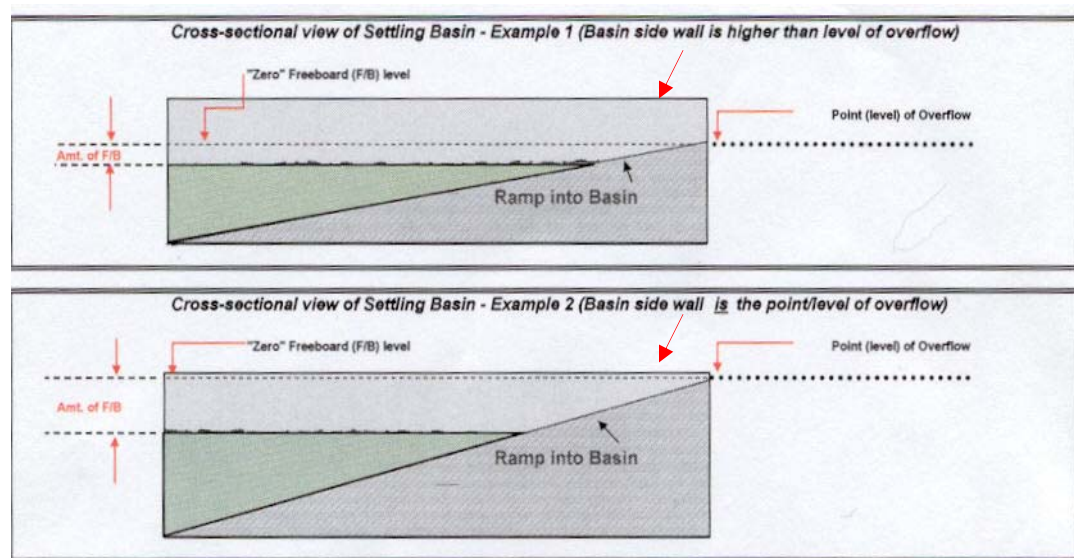
The reduced monitoring provision was revised in 2003 to address concerns of noncompliance that may occur after reduced monitoring frequency is granted. Except for TPH, reduced monitoring may have been granted for a facility that was covered under the previous general permit. Prior to issuing coverage under the reissued general permit, the staff should review the DMRs received after the reduced monitoring frequency was granted during the current permit term. If full compliance is demonstrated, the discharge is eligible for reduced monitoring frequency under the reissued general permit. In all other cases (Parts I.A.1 and I.A.2), monitoring shall be once per month for the first year of permit coverage. If the first year results demonstrate full compliance, monitoring could be reduced to once per quarter. Request for monitoring reduction should be initiated by the permittee and monitoring can only be reduced when the authorization is received from the regional office. In order to demonstrate compliance, it is anticipated that 12 data points will be gathered in the first year unless no discharge is reported in a particular month. Before granting reduced monitoring the permit writer should consult with the inspector to verify good operating practices at the facility and that an inspection has been conducted recently. If reduced monitoring is granted, change CEDS, notify the permittee and send new DMRs. Follow CEDS guidance for the concrete products general permit module for procedures to change the monitoring requirements. Should the permittee be issued a Warning Letter related to violation of effluent limitations, a Notice of Violation, or be the subject of

an active enforcement action, monitoring frequency shall revert to once per month, upon issuance of the letter or notice or initiation of the enforcement action, and remain in effect until the permit's expiration date. If monitoring reverts back, change CEDS, notify the permittee and send new DMRs.

Freeboard requirements Part I.B.10

This special condition was amended such that where basins are operated in series, the one foot freeboard requirement for the upper basins may be waived provided the final basin will maintain the freeboard requirements. This was added to reflect existing practice and design of these basins and to ensure the lower basin will not overflow in high flow rain events. It is deemed reasonable and protective since the additional treatment provided by series basins is preferred. Central office staff has a spreadsheet tool that can be used to estimate if the basins are large enough to maintain freeboard (or if more than one foot of freeboard is required to prevent overflow) if there is evidence that freeboard is not being maintained. Length and width of the basins, watershed area in acres, watershed length and width and rainfall amounts are needed. We will use and improve this tool during the 2008 -2013 cycle to determine its usefulness and accuracy and to determine if more changes are needed to improve compliance with this special condition.

The following illustration shows how to correctly measure available freeboard. Both examples illustrate the measurement for freeboard start with the point of overflow at the edge of the ramp down to the water surface. Some permittees measure incorrectly from the top of the basin wall to the water surface which is only correct in example 2 when the basin wall matches the point of overflow.



The waiver is optional because there may be instances where freeboard is best measured and maintained elsewhere in the system. It is up to the inspector to determine if the waiver is appropriate at each facility. Some treatment systems may be set up to back flow to 'upper' basins and freeboard should be measured and maintained overall or in an 'upper' basin.

Liner Requirements Part I.B.13

This special condition was modified in 2008 to clarify liner requirements for settling basins built after February 1998 set forth in the Code of Virginia § [62.1-44.15:5.2](#). The existing permit contains liner requirements for process wastewater commingled with storm water and this was clarified to include process water or process water commingled with storm water. The liner requirement is not intended to apply to basins intended to be storm water management best management practices.

Finding and Adding New Outfalls for Coverage under Part I.A

Have the permittee submit updated information on the outfall along with a plat showing the outfall location, which can be appended to the original registration statement and prepare a transmittal letter for modified coverage. Follow CEDS guidance for the concrete products general permit module for procedures to add the new outfall. Send a revised or new limits page and DMR, as appropriate, to the permittee.

Attachments:

- A. General Permit Regulation
- B. Fact Sheet
- C. Registration Statement and Instructions
- D. General Permit Pages
- E. Example Registration Statement Transmittal Letter
- F. Example Transmittal Letter for General Permit Issuance

ATTACHMENT A

General VPDES Permit Regulation

STATE WATER CONTROL BOARD
Reissuance of the General VPDES Permit for Concrete Products Facilities

CHAPTER 193

GENERAL VIRGINIA POLLUTANT DISCHARGE ELIMINATION SYSTEM (VPDES) PERMIT
FOR CONCRETE PRODUCTS FACILITIES

9VAC25-193-10. Definitions.

The words and terms used in this chapter shall have the meanings defined in §62.1-44.2 et seq. of the Code of Virginia (State Water Control Law) and 9VAC25-31 (VPDES Permit Regulation), unless the context clearly indicates otherwise, except that for the purposes of this chapter:

"Industrial activity" means facilities or those portions of a facility where the primary purpose is classified as:

1. Standard Industrial Classification (SIC) Code 3271—Concrete Block and Brick (Office of Management and Budget (OMB) SIC Manual, 1987);
2. SIC Code 3272—Concrete Products, Except Block and Brick; or
3. SIC Code 3273—Ready-Mixed Concrete, including both permanent and portable plants.

These facilities are collectively defined as "Concrete Products Facilities".

9VAC25-193-20. Purpose.

This general permit regulation governs the discharge of process waste water and storm water associated with industrial activity from concrete products facilities classified as Standard Industrial Classification Codes 3271, 3272 and 3273, provided that the discharge is through a point source to surface waters.

9VAC25-193-30. Delegation of authority.

The director of the Department of Environmental Quality, or his designee, may perform any act of the board provided under this chapter, except as limited by §62.1-44.14 of the Code of Virginia.

9VAC25-193-40. Effective date of the permit.

This general VPDES permit became effective on October 1, 2008, and it will expire on September 30, 2013. With respect to a particular facility, this general permit shall become effective upon the facility owner's compliance with the provisions of 9VAC25-193-50 and the receipt of a copy of the general VPDES permit.

9VAC25-193-50. Authorization to discharge.

A. Any owner governed by this general permit is hereby authorized to discharge to surface waters of the Commonwealth of Virginia provided that the owner has filed with the department the registration statement described in 9VAC25-193-60, has filed the required permit fee, has complied or will comply with the effluent limitations and other requirements of 9VAC25-193-70, and has complied with the following conditions:

1. The owner shall not have been required to obtain an individual permit as may be required in 9VAC25-31-170 B 3; and
2. The owner shall not be authorized by this general permit to discharge to state waters specifically named in other board regulations or policies which prohibit such discharges.

B. Receipt of this general permit does not relieve any owner of the responsibility to comply with any other applicable federal, state or local statute, ordinance or regulation.

9VAC25-193-60. Registration statement.

A. Deadlines for submitting registration statement. The owner shall file a complete General VPDES Permit registration statement which shall serve as a notice of intent to be covered under the general VPDES permit for concrete products facilities. Any owner proposing a new discharge shall file a complete registration statement at least 30 days prior to the date planned for commencing operation of the concrete products facility. Any owner of an existing concrete products facility covered by an individual VPDES permit who is proposing to be covered by this general permit shall file a complete registration statement at least 180 days prior to the expiration date of the individual VPDES permit. Any owner of an existing concrete products facility not currently covered by a VPDES permit who is proposing to be covered by this general permit shall file a complete registration statement.

B. The owner shall submit a registration statement that contains the following information:

1. Name and location of the facility;
2. Name, mailing address, and telephone number of the facility owner;
3. Name, mailing address, and telephone number of the operator if different than owner;
4. Facility's Standard Industrial Classification (SIC) Code(s);
5. Nature of business at facility;
6. Indicate if the facility is proposed or existing; if the facility has a current VPDES and/or VPA Permit; and Permit Number(s) for any current VPDES and/or VPA Permits;
7. Description of the wastewater treatment or reuse/recycle system(s); indicate if there are any system(s) which operate in a "no discharge" mode;
8. If settling basins are used for treatment and control of process wastewater and commingled storm water, indicate the original date of construction, and whether these basins are lined with concrete or any other impermeable materials;
9. Indicate if there are vehicle/equipment maintenance activities on site. If yes, indicate if there is any process wastewater generated from these activities;
10. Indicate if this facility discharges noncontact cooling water from a geothermal unit or other system. If yes, description of the source of noncontact cooling water;
11. Indicate if any chemical additives are used in the geothermal or other system which discharges noncontact cooling water. If yes, list of chemical additive employed and its purpose; proposed schedule and quantity of chemical usage, and estimated concentration in the discharge; description of any wastewater treatment or retention during the use of the additives, if applicable; and a Material Safety Data Sheet (MSDS) and available aquatic toxicity information for each additive proposed for use;
12. Description of any measures employed to reclaim, reuse or disposal of the waste concrete materials;
13. A schematic drawing which shows the source(s) of water used on the property, the industrial operations contributing to or using water, and the conceptual design of the methods of treatment and disposal of wastewater and solids;
14. A topographic map, extending to at least one mile beyond property boundary, which shows the outline of the facility, the location of each of its existing and proposed intake and discharge points, and the locations of any wells, springs, and other surface water bodies;
15. Discharge outfall information, including outfall number(s), processes involved, estimated flow (gallons per day), receiving water bodies, and duration and frequency of each discharge (hours per day and days per week);
16. For a proposed facility that discharges storm water, indicate if a Storm Water Pollution Prevention Plan has been prepared.

17. The following certification: "I hereby grant to duly authorized agents of the Department of Environmental Quality, upon presentation of credentials, permission to enter the property where the treatment works is located for the purpose of determining compliance with or the suitability of coverage under the General Permit. I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system or those persons directly responsible for gathering the information, the information submitted is to the best of my knowledge and belief true, accurate, and complete. I am aware that there are significant penalties for submitting false information including the possibility of fine and imprisonment for knowing violations."

The registration statement shall be signed in accordance with the requirements of 9VAC25-31-110.

9VAC25-193-70. General permit.

Any owner whose registration statement is accepted by the board will receive the following permit and shall comply with the requirements contained therein and be subject to all requirements of 9VAC25-31.

General Permit No: VAG11

Effective Date: October 1, 2008

Expiration Date: September 30, 2013

GENERAL PERMIT FOR CONCRETE PRODUCTS FACILITIES AUTHORIZATION TO DISCHARGE UNDER THE VIRGINIA POLLUTANT DISCHARGE ELIMINATION SYSTEM AND THE VIRGINIA STATE WATER CONTROL LAW

In compliance with the provisions of the Clean Water Act, as amended, and pursuant to the State Water Control Law and regulations adopted pursuant thereto, owners of concrete products facilities are authorized to discharge to surface waters within the boundaries of the Commonwealth of Virginia, except those specifically named in board regulations or policies which prohibit such discharges.

The authorized discharge shall be in accordance with this cover page, Part I-Effluent Limitations, Monitoring Requirements, and Special Conditions, Part II-Storm Water Management, and Part III-Conditions Applicable to All VPDES Permits, as set forth herein.

Part I

A. Effluent limitations and monitoring requirements.

1. Process wastewater.

During the period beginning on the permit's effective date and lasting until the permit's expiration date, the permittee is authorized to discharge process wastewater which may contain input from vehicle/equipment maintenance activities, and may be commingled with noncontact cooling water or storm water associated with industrial activity. Samples taken in compliance with the monitoring requirements specified below shall be taken at outfall(s).

Such discharges shall be limited and monitored by the permittee as specified below:

EFFLUENT CHARACTERISTICS	DISCHARGE LIMITATIONS			MONITORING REQUIREMENTS	
	Average	Maximum	Minimum	Frequency	Sample Type
Flow (MGD)	NL	NL	NL	(6)	Estimate
Total Suspended Solids (mg/l)	30	60	NL	(6)	Grab
pH (standard units)	NA	9.0 ⁽¹⁾	6.0 ⁽¹⁾	(6)	Grab
Total Petroleum Hydrocarbons ⁽²⁾ (mg/l)	NA	15	NL	1/3 Months	Grab
Total Residual Chlorine ⁽³⁾ (mg/l)	0.016	0.016	NL	(6)	Grab
Ammonia-N ⁽³⁾ (mg/l)	NA	NL	NL	(6)	Grab
Temperature ⁽⁴⁾ (°C)	NA	(5)	NL	(6)	Immersion Stabilization

NL = No limitation, monitoring required

NA = Not applicable

⁽¹⁾Where the Water Quality Standards (9VAC25-260) establish alternate standards for pH in the waters receiving the discharge, those standards shall be the maximum and minimum effluent limitations.

⁽²⁾Total Petroleum Hydrocarbons limitation and monitoring are only required where a discharge contains process wastewater generated from the vehicle/equipment maintenance activities. Total Petroleum Hydrocarbons shall be analyzed using the Wisconsin Department of Natural Resources Modified Diesel Range Organics Method as specified in Wisconsin publication SW-141 (1995), or by EPA SW-846 Method 8015C for diesel range organics, or by EPA SW-846 Method 8270D. If Method 8270D is used, the lab must report the combination of diesel range organics and polynuclear aromatic hydrocarbons.

⁽³⁾Chlorine limitation and monitoring are only required where the discharge contains cooling water that is chlorinated. Ammonia monitoring is only required where the discharge contains cooling water that is disinfected using chloramines.

⁽⁴⁾Temperature limitation and monitoring are only required where a discharge contains cooling water.

⁽⁵⁾The effluent temperature shall not exceed a maximum 32°C for discharges to nontidal coastal and piedmont waters, 31°C for mountain and upper piedmont waters, 21°C for put and take trout waters, or 20°C for natural trout waters. No maximum temperature limit applies to discharges to estuarine waters.

For estuarine waters, nontidal coastal and piedmont waters, mountain and upper piedmont waters, and put and take trout waters, the effluent shall not cause an increase in temperature of the receiving stream of more than 3°C above the natural water temperature. For natural trout waters, the temperature of the effluent shall not cause an increase of 1°C above natural water temperature. The effluent shall not cause the temperature in the receiving stream to change more than 2°C per hour, except in the case of natural trout waters where the hourly temperature change shall not exceed 0.5°C.

Natural temperature is defined as that temperature of a body of water (measured as the arithmetic average over one hour) due solely to natural conditions without the influence of any point-source discharge.

⁽⁶⁾For a facility that was covered by the previous general permit, and reduced monitoring was granted and compliance demonstrated, monitoring frequency shall be 1/quarter. In all other cases, monitoring frequency shall be 1/month in the first year of permit coverage. If the first year results demonstrate full compliance with the effluent limitations and the permittee receives authorization from the DEQ regional office, monitoring frequency shall be reduced to 1/quarter. Should the permittee be issued a warning letter related to violation of effluent limitations, a notice of violation, or be the subject of an active enforcement action, monitoring frequency shall revert to 1/month, upon issuance of the letter or notice or initiation of the enforcement action and remain in effect until the permit's expiration date. Reports of quarterly monitoring shall be submitted to the DEQ regional office no later than the 10th day of April, July, October, and January.

Part I. Effluent Limitations and Monitoring Requirements

A. Effluent limitations and monitoring requirements.

2. Noncontact cooling water.

During the period beginning on the permit's effective date and lasting until the permit's expiration date, the permittee is authorized to discharge noncontact cooling water. Samples taken in compliance with the monitoring requirements specified below shall be taken at outfall(s).

Such discharges shall be limited and monitored by the permittee as specified below:

EFFLUENT CHARACTERISTICS	DISCHARGE LIMITATIONS			MONITORING REQUIREMENTS	
	Average	Maximum	Minimum	Frequency	Sample Type
Flow (MGD)	NL	NL	NA	(4)	Estimate
pH (standard units)	NA	9.0 ⁽¹⁾	6.0 ⁽¹⁾	(4)	Grab
Total Residual Chlorine ⁽²⁾ (mg/l)	0.016	0.016	NA	(4)	Grab
Ammonia-N ⁽²⁾ (mg/l)	NA	NL	NA	(4)	Grab
Temperature (°C)	NA	(3)	NA	(4)	Immersion Stabilization

NL = No limitation, monitoring required

NA = Not applicable

⁽¹⁾Where the Water Quality Standards (9VAC25-260) establish alternate standards for pH in the waters receiving the discharge, those standards shall be the maximum and minimum effluent limitations.

⁽²⁾Chlorine limitation and monitoring are only required where the source of cooling water is chlorinated. Ammonia monitoring is only required where cooling water is disinfected using chloramines.

⁽³⁾The effluent temperature shall not exceed a maximum 32°C for discharges to nontidal coastal and piedmont waters, 31°C for mountain and upper piedmont waters, 21°C for put and take trout waters, or 20°C for natural trout waters. No maximum temperature limit applies to discharges to estuarine waters. For estuarine waters, nontidal coastal and piedmont waters, mountain and upper piedmont waters, and put and take trout waters, the effluent shall not cause an increase in temperature of the receiving stream of more than 3°C above the natural water temperature. For natural trout waters, the temperature of the effluent shall not cause an increase of 1°C above natural water temperature. The effluent shall not cause the temperature in the receiving stream to change more than 2°C per hour, except in the case of natural trout waters where the hourly temperature change shall not exceed 0.5°C. Natural temperature is defined as that temperature of a body of water (measured as the arithmetic average over one hour) due solely to natural conditions without the influence of any point-source discharge.

⁽⁴⁾For a facility that was covered by the previous general permit, and reduced monitoring was granted and compliance demonstrated, monitoring frequency shall be 1/quarter. In all other cases, monitoring frequency shall be 1/month in the first year of permit coverage. If the first year results demonstrate full compliance with the effluent limitations and the permittee receives authorization from the DEQ regional office, monitoring frequency shall be reduced to 1/quarter. Should the permittee be issued a warning letter related to violation of effluent limitations, a notice of violation, or be the subject of an active enforcement action, monitoring frequency shall

be reverted to 1/month, upon issuance of the letter or notice or initiation of the enforcement action and remain in effect until the permit's expiration date. Reports of quarterly monitoring shall be submitted to the DEQ regional office no later than the 10th day of April, July, October, and January.

Part I. Effluent Limitations and Monitoring Requirements

A. Effluent limitations and monitoring requirements.

3. Storm water associated with industrial activity—storm event monitoring.

During the period beginning on the permit's effective date and lasting until the permit's expiration date, the permittee is authorized to discharge storm water associated with industrial activity which does not combine with other process wastewaters or noncontact cooling water prior to discharge. Samples taken in compliance with the monitoring requirements specified below shall be taken at outfall(s).

Such discharges shall be limited and monitored by the permittee as specified below:

EFFLUENT CHARACTERISTICS	DISCHARGE LIMITATIONS		MONITORING REQUIREMENTS	
	Maximum	Minimum	Frequency	Sample Type
Flow (MGD)	NL	NA	1/Year	Estimate ⁽¹⁾
Total Petroleum Hydrocarbons ⁽³⁾ (mg/l)	NL	NA	1/Year	Grab ⁽²⁾
Total Suspended Solids (mg/l)	NL	NA	1/Year	Grab ⁽²⁾
Total Recoverable Iron (mg/l)	NL	NA	1/Year	Grab ⁽²⁾
pH (standard units)	NL	NA	1/Year	Grab ⁽²⁾

NL = No limitation, monitoring required

NA = Not applicable

⁽¹⁾Estimate of the total volume of the discharge during the storm event in accordance with the Operation and Maintenance Manual.

⁽²⁾The grab sample shall be taken during the first 30 minutes of the discharge. If during the first 30 minutes it was impracticable, then a grab sample shall be taken during the first hour of discharge, and the permittee shall submit with the Discharge Monitoring Report a description of why a grab sample during the first 30 minutes was impracticable.

⁽³⁾Total Petroleum Hydrocarbons shall be analyzed using the Wisconsin Department of Natural Resources Modified Diesel Range Organics Method as specified in Wisconsin publication SW-141 (1995), or by EPA SW-846 Method 8015C for diesel range organics, or by EPA SW-846 Method 8270D. If Method 8270D is used, the lab must report the combination of diesel range organics and polynuclear aromatic hydrocarbons.

4. All storm water samples shall be collected from the discharge resulting from a storm event that is greater than 0.1 inches in magnitude and that occurs at least 72 hours from the previously measurable (greater than 0.1 inch rainfall) storm event. Specific storm event data shall be reported with the Discharge Monitoring Report in accordance with Part II A.

5. Reports of annual monitoring shall be submitted to the DEQ regional office no later than the 10th day of January of each year.

6. A quarterly visual monitoring shall be performed and recorded in accordance with Part II D.

B. Special conditions.

1. There shall be no discharge of floating solids or visible foam in other than trace amounts. There shall be no solids deposition in surface water as a result of the industrial activity in the vicinity of the outfall.

2. Except as expressly authorized by this permit, no product, materials, industrial wastes, or other wastes resulting from the purchase, sale, mining, extraction, transport, preparation, or storage of raw or intermediate materials, final product, byproduct or wastes, shall be handled, disposed of, or stored so as to permit a discharge of such product, materials, industrial wastes, or other wastes to surface waters.

3. Vehicles and equipment utilized during the industrial activity on a site must be operated and maintained in such a manner as to minimize the potential or actual point source pollution of surface waters. Fuels, lubricants, coolants, and hydraulic fluids, or any other petroleum products, shall not be disposed of by discharging on the ground or into surface waters. Spent fluids shall be disposed of in a manner so as not to enter the surface or ground waters of the state and in accordance with the applicable state and federal disposal regulations. Any spilled fluids shall be cleaned up to the maximum extent practicable and disposed of in a manner so as not to allow their entry into the surface or ground waters of the state.

4. All washdown and washout of trucks, mixers, transport buckets, forms or other equipment shall be conducted within designated washdown and washout areas. All washout/washdown water shall be collected for recycle or treated prior to discharge.

5. Any waste concrete and dredged solids from the settling basins shall be managed within a designated area, and any wastewaters including storm water generated from these activities shall be collected for recycle or treated prior to discharge.

6. No domestic sewage discharges to surface waters are permitted under this general permit.

7. For geothermal or other system which discharges noncontact cooling water, the use of any chemical additives, except chlorine, without prior approval is prohibited under this general permit. Prior approval shall be obtained from the DEQ Regional Office before any changes are made to the chemical usage in the geothermal or other system. Requests for approval of chemical use shall be made in writing and shall include the following information:

- a. The chemical additive to be employed and its purpose;
- b. The proposed schedule and quantity of chemical usage, and the estimated concentration in the discharge;
- c. The wastewater treatment or retention (if any) to be provided during the use of the additive; and
- d. A Material Safety Data Sheet (MSDS) and available aquatic toxicity information for each additive proposed for use.

8. Within 180 days after the date of coverage under this general permit, the permittee shall develop an Operations and Maintenance (O&M) Manual for the permitted facility. The O&M Manual shall include procedures and practices for the mitigation of pollutant discharges and for the protection of state waters from the facility's operations. The manual shall address, at a minimum, operations and maintenance practices for the wastewater treatment process units and chemical and material storage areas, solids management and disposal procedures, temporary and long-term facility closure plans, testing requirements and procedures, recordkeeping and reporting requirements and the duties and roles of responsible officials.

The permittee shall implement the O&M Manual procedures and practices as soon as possible but no later than 12 months after the date of coverage under this general permit. The manual shall be kept on site at the permitted facility and shall be made available to the department upon request.

For a facility that was covered by the previous permit, an O&M Manual was required to be developed and implemented for that facility. Within 90 days after the date of coverage under this general permit, the existing O&M Manual shall be reviewed and modified, as

appropriate, to conform to the requirements of this permit. The existing O&M Manual shall continue to be implemented until the manual, if required, is revised and implemented.

9. If the concrete products facility discharges through a municipal separate storm sewer system to surface waters, the permittee shall, within 30 days of coverage under this general permit, notify the owner of the municipal separate storm sewer system of the existence of the discharge and provide the following information: the name of the facility; a contact person and phone number; nature of the discharge; number of the outfalls; and the location of the discharge. A copy of such notification shall be provided to the department.

10. The permittee shall ensure that all basins and lagoons maintain a minimum freeboard of one foot at all times except during a 72-hour transition period after a measurable rainfall event. During the 72-hour transition period, no discharge from the basins and lagoons shall occur unless it is in accordance with this permit. Within 72 hours after a measurable rainfall event, the freeboard in all basins and lagoons shall return to the minimum freeboard of one foot. Where basins are operated in a series mode of operation, the one-foot freeboard requirement for the upper basins may be waived provided the final basin will maintain the freeboard requirements of this special condition. Should the one-foot freeboard not be maintained, the permittee shall immediately notify the DEQ Regional Office, describe the problem and corrective measures taken to correct the problem. Within five days of notification, the permittee shall submit a written statement to the regional office of explanation and corrective measures taken. In order to demonstrate compliance, the permittee shall conduct daily inspections while the facility is in operation and maintain an inspection log. The inspection log shall include at least the date and time of inspection, the weather data including the occurrence of a measurable rainfall event, the printed name and the handwritten signature of the inspector, the freeboard measurement in inches, a notation of observation made, and any corrective measures, if appropriate, taken. The log shall be kept onsite and be made available to the department upon request.

11. For treatment systems which operate only in a "no discharge" mode, there shall be no discharge of pollutants to surface waters from these systems except in the case of a storm event which is greater than a 25 year-24 hour storm event. The operation of these systems shall not contravene the Water Quality Standards (9VAC25-260), as adopted and amended by the board, or any provision of the State Water Control Law.

12. The permittee shall notify the department as soon as he knows or has reason to believe:

a. That any activity has occurred or will occur which would result in the discharge, on a routine or frequent basis, of any toxic pollutant which is not limited in this permit if that discharge will exceed the highest of the following notification levels:

(1) One hundred micrograms per liter (100 µg/l);

(2) Two hundred micrograms per liter (200 µg/l) for acrolein and acrylonitrile; five hundred micrograms per liter (500 µg/l) for 2,4-dinitrophenol and for 2-methyl-4,6-dinitrophenol; and one milligram per liter (1 mg/l) for antimony;

(3) Five times the maximum concentration value reported for that pollutant in the permit application; or

(4) The level established by the board in accordance with 9VAC25-31-220 F.

b. That any activity has occurred or will occur which would result in any discharge, on a nonroutine or infrequent basis, of a toxic pollutant which is not limited in this permit if that discharge will exceed the highest of the following notification levels:

(1) Five hundred micrograms per liter (500 µg/l);

(2) One milligram per liter (1 mg/l) for antimony;

- (3) Ten times the maximum concentration value reported for that pollutant in the permit application; or
- (4) The level established by the board in accordance with 9VAC25-31-220 F.
13. All settling basins used for treatment and control of process wastewater or process wastewater commingled with storm water that were constructed on or after February 2, 1998, shall be lined with concrete or any other impermeable materials.
14. Treated wastewater may be used on site for the purposes of dust suppression. Dust suppression shall be carried out as a best management practice but not a wastewater disposal method. No ponding or surface runoff shall occur as a result of such activity.
15. Compliance reporting under Part I A.

a. The quantification levels (QL) shall be as follows:

Effluent Characteristic	Quantification Level
Chlorine	0.10 mg/l
Ammonia-N	0.20 mg/l

b. Reporting.

(1) Monthly Average. Compliance with the monthly average limitations and/or reporting requirements for the parameters listed in Part I A shall be determined as follows: All concentration data below the QL listed in subsection 15 a of this subsection shall be treated as zero. All concentration data equal to or above the QL listed shall be treated as it is reported. An arithmetic average shall be calculated using all reported data, including the defined zeros, for the month. This arithmetic average shall be reported on the DMR as calculated. If all data are below the QL then the average shall be reported as "<QL". If reporting for quantity is required on the DMR and the calculated concentration is <QL then report "<QL" for the quantity, otherwise use the calculated concentration.

(2) Daily Maximum. Compliance with the daily maximum limitations and/or reporting requirements for the parameters listed in Part I A shall be determined as follows: All concentration data below the QL listed in subdivision 15 a of this subsection shall be treated as zero. All concentration data equal to or above the QL shall be treated as reported. An arithmetic average of the values shall be calculated using all reported data, including the defined zeros, collected for each day during the reporting month. The maximum value of these daily averages thus determined shall be reported on the DMR as the Daily Maximum. If all data are below the QL then the average shall be reported as "<QL". If reporting for quantity is required on the DMR and the calculated concentration is <QL then report "<QL" for the quantity, otherwise use the calculated concentration.

(3) Any single datum required shall be reported as "<QL" if it less than QL listed in subdivision 15 a of this subsection. Otherwise the numerical value shall be reported.

(4) The permittee shall report at least two significant digits for a given parameter. Regardless of the rounding convention used (i.e. five always rounding up or to the nearest even number) by the permittee, the permittee shall use the convention consistently and shall ensure that consulting laboratories employed by the permittee use the same convention.

Part II.
Storm Water Management.

A. Recording of results. For each discharge measurement or sample taken pursuant to the storm event monitoring requirements of this permit, the permittee shall record and report with the Discharge Monitoring Reports (DMRs) the following information:

1. The date and duration (in hours) of the storm event(s) sampled;
2. The rainfall measurements or estimates (in inches) of the storm event which generated the sampled discharge; and
3. The duration between the storm event sampled and the end of the previous measurable (greater than 0.1 inch rainfall) storm event.

B. Representative discharge. When a facility has two or more exclusively storm water outfalls that, based on a consideration of industrial activity, significant materials, and management practices and activities within the area drained by the outfall, the permittee reasonably believes discharge substantially identical effluent, the permittee may test the effluent of one of such outfalls and include with the DMRs an explanation that the quantitative data also applies to the substantially identical outfalls provided that the permittee includes a description of the location of the outfalls and explains in detail why the outfalls are expected to discharge substantially identical effluent. In addition, for each exclusively storm water outfall that the permittee believes is representative, an estimate of the size of the drainage area (in square feet) and an estimate of the runoff coefficient of the drainage area (e.g., low (under 40%), medium (40% to 65%) or high (above 65%)) shall be provided.

C. Sampling waiver. When a permittee is unable to collect storm water samples required in Part I A or other applicable sections of this permit within a specified sampling period due to adverse climatic conditions, the permittee shall collect a substitute sample from a separate qualifying event in the next period and submit these data along with the data for the routine sample in that period. Adverse weather conditions which may prohibit the collection of samples include weather conditions that create dangerous conditions for personnel (such as local flooding, high winds, hurricane, tornadoes, electrical storms, etc.) or otherwise make the collection of a sample impracticable (drought, extended frozen conditions, etc.).

D. Quarterly visual examination of storm water quality. The permittee shall perform and document a visual examination of a storm water discharge associated with industrial activity from each outfall, except discharges exempted below. The visual examination(s) must be made during daylight hours (e.g., normal working hours), at least once in each of the following three-month periods: January through March, April through June, July through September, and October through December.

1. Examinations shall be made of samples collected within the first 30 minutes (or as soon thereafter as practical, but not to exceed one hour) of when the runoff or snowmelt begins discharging. The examination shall document observations of color, odor, clarity, floating solids, settled solids, suspended solids, foam, oil sheen, and other obvious indicators of storm water pollution. The examination must be conducted in a well lit area. No analytical tests are required to be performed on the samples. All such samples shall be collected from the discharge resulting from a storm event that is greater than 0.1 inches in magnitude and that occurs at least 72 hours from the previous measurable (greater than 0.1 inch rainfall) storm event. The required 72-hour storm event interval is waived where the preceding measurable storm event did not result in a measurable discharge from the facility. The required 72-hour storm event interval may also be waived where the permittee documents that less than a 72-hour interval is representative for local storm events during the season when sampling is being conducted. If no qualifying storm event resulted in discharge from the facility during a monitoring period, visual monitoring is exempted provided that the permittee document that no qualifying storm event occurred that resulted in storm water discharge during that

quarter. Where practicable, the same individual should carry out the collection and examination of discharges for the entire permit term.

2. Visual examination reports must be maintained onsite with the pollution prevention plan. The report shall include the outfall location, the examination date and time, examination personnel, the nature of the discharge (i.e., runoff or snow melt), visual quality of the storm water discharge (including observations of color, odor, clarity, floating solids, settled solids, suspended solids, foam, oil sheen, and other obvious indicators of storm water pollution), visual quality of the receiving stream (including observations of solids deposition and oil sheen from the industrial activity) in the vicinity of the outfall (including ditches and conveyances) and probable sources of any observed storm water contamination.

3. If the facility has two or more outfalls that, based on a consideration of industrial activity, significant materials, and management practices and activities within the area drained by the outfall, the permittee reasonably believes discharge substantially identical effluents, the permittee may collect a sample of effluent of one of such outfalls and report that the examination data also applies to the substantially identical outfall(s) provided that the permittee includes in the storm water pollution prevention plan a description of the location of the outfalls and explains in detail why the outfalls are expected to discharge substantially identical effluents. In addition, for each outfall that the permittee believes is representative, an estimate of the size of the drainage area (in square feet) and an estimate of the runoff coefficient of the drainage area (i.e., low (under 40%), medium (40 to 65%), or high (above 65%)) shall be provided in the plan.

4. When the permittee is unable to conduct the visual examination due to adverse climatic conditions, the permittee must document the reason for not performing the visual examination and retain this documentation onsite with the records of the visual examinations. Adverse weather conditions that may prohibit the collection of samples include weather conditions that create dangerous conditions for personnel (such as local flooding, high winds, hurricane, tornadoes, electrical storms, etc.) or otherwise make the collection of a sample impracticable (drought, extended frozen conditions, etc.).

E. Allowable nonstorm water discharges.

1. The following nonstorm water discharges are authorized by this permit provided the nonstorm water component of the discharge is in compliance with Part II E 2 below.

- a. Discharges from fire fighting activities;
- b. Fire hydrant flushings;
- c. Potable water including water line flushings;
- d. Uncontaminated air conditioning or compressor condensate;
- e. Irrigation drainage;
- f. Landscape watering provided all pesticides, herbicides, and fertilizer have been applied in accordance with manufacturer's instructions;
- g. Pavement wash waters where no detergents are used and no spills or leaks of toxic or hazardous materials have occurred (unless all spilled material has been removed);
- h. Routine external building wash down which does not use detergents;
- i. Uncontaminated ground water or spring water;
- j. Foundation or footing drains where flows are not contaminated with process materials such as solvents;
- k. Incidental windblown mist from cooling towers that collects on rooftops or adjacent portions of the facility, but NOT intentional discharges from the cooling tower (e.g., "piped" cooling tower blowdown or drains).

2. Except for flows from fire fighting activities, the Storm Water Pollution Prevention Plan must include:

- a. Identification of each allowable nonstorm water source;
- b. The location where it is likely to be discharged; and
- c. Descriptions of appropriate BMPs for each source.

3. If mist blown from cooling towers is included as one of the allowable nonstorm water discharges, the facility must specifically evaluate the potential for the discharges to be contaminated by chemicals used in the cooling tower. The permittee must determine that the levels of such chemicals in the discharges will not cause or contribute to a violation of an applicable water quality standard after implementation of the BMPs selected to control such discharges.

F. Releases of hazardous substances or oil in excess of reportable quantities. The discharge of hazardous substances or oil in the storm water discharge(s) from this facility shall be prevented or minimized in accordance with the applicable storm water pollution prevention plan for the facility. This permit does not authorize the discharge of hazardous substances or oil resulting from an onsite spill. Where a release containing a hazardous substance or oil in an amount equal to or in excess of a reportable quantity established under either 40 CFR Part 110 (1998), 40 CFR Part 117 (1998) or 40 CFR Part 302 (1998) occurs during a 24-hour period, the permittee is required to notify the department in accordance with the requirements of Part III G as soon as he has knowledge of the discharge. Where a release enters a municipal separate storm sewer system (MS4), the permittee shall also notify the owner of the MS4. In addition, the storm water pollution prevention plan required by this permit must be reviewed to identify measures to prevent the reoccurrence of such releases and to respond to such releases, and the plan must be modified where appropriate. This permit does not relieve the permittee of the reporting requirements of 40 CFR Part 110 (1998), 40 CFR Part 117 (1998) and 40 CFR Part 302 (1998) or §62.1-44.34:19 of the Code of Virginia.

G. Storm water pollution prevention plans. A storm water pollution prevention plan is required to be developed for the facility. The plan shall be prepared in accordance with good engineering practices, and shall identify potential sources of pollution which may reasonably be expected to affect the quality of storm water discharges associated with industrial activity from the facility. In addition, the plan shall describe and ensure the implementation of practices which are to be used to reduce the pollutants in storm water discharges associated with industrial activity at the facility and to assure compliance with the terms and conditions of this permit. Permittees must implement the provisions of the storm water pollution prevention plan as a condition of this permit.

The storm water pollution prevention plan requirements of this permit may be fulfilled by incorporating by reference other plans or documents such as an erosion and sediment control plan, a spill prevention control and countermeasure (SPCC) plan developed for the facility under §311 of the Clean Water Act or best management practices (BMP) programs otherwise required for the facility provided that the incorporated plan meets or exceeds the plan requirements of Part II G 4. If an erosion and sediment control plan is being incorporated by reference, it shall have been approved by the locality in which the activity is to occur or by another appropriate plan approving authority authorized under the Virginia Erosion and Sediment Control Regulation, 4VAC50-30. All plans incorporated by reference into the storm water pollution prevention plan become enforceable under this permit.

1. Deadlines for plan preparation and compliance.

- a. For a storm water discharge associated with industrial activity that is existing on or before the effective date of this permit, the storm water pollution prevention plan shall be prepared and implemented as expeditiously as practicable, but not later than 270 days from the date of coverage under this permit. For a facility that was covered by the previous permit, a storm water pollution prevention plan was required to be

developed and implemented for that facility. Within 120 days after the date of coverage under this permit, the existing storm water pollution prevention plan shall be reviewed and modified, as appropriate, to conform to the requirements of this permit. The existing storm water pollution prevention plans shall continue to be implemented until a new plan, if required, is developed and implemented.

b. The plan for any facility where industrial activity commences after the effective date of this permit, and except as provided elsewhere in this permit, shall be prepared, implemented and provide for compliance with the terms of the plan and this permit on or before the date of submission of a registration statement to be covered under this permit.

c. In cases where construction is necessary to implement measures required by the plan, the plan shall contain a schedule that provides compliance with the plan as expeditiously as practicable, but no later than three years from the date of coverage under this permit. Where a construction compliance schedule is included in the plan, the schedule shall include appropriate nonstructural and/or temporary controls to be implemented in the affected portion(s) of the facility prior to completion of the permanent control measure.

2. Signature and plan review.

a. The plan shall be signed in accordance with Part III K, and be retained on-site at the facility covered by this permit in accordance with Part III B.

b. The permittee shall make the storm water pollution prevention plan, annual site compliance inspection report, or other information available to the department upon request.

c. The director, or his designee, may notify the permittee in writing at any time that the plan does not meet one or more of the minimum requirements of this part. Such notification shall identify those provisions of the permit which are not being met by the plan, and identify which provisions of the plan require modifications in order to meet the minimum requirements of this part. Within 60 days of such notification from the director, or as otherwise provided by the director, the permittee shall make the required changes to the plan and shall submit to the department a written certification that the requested changes have been made.

3. Keeping plans current. The permittee shall amend the plan whenever there is a change in design, construction, operation, or maintenance, which has a significant effect on the potential for the discharge of pollutants to surface waters of the state or if the storm water pollution prevention plan proves to be ineffective in eliminating or significantly minimizing pollutants from sources identified under Part II G 4 b of this permit, or in otherwise achieving the general objectives of controlling pollutants in storm water discharges associated with industrial activity.

4. Contents of plan. The plan shall include, at a minimum, the following items:

a. Pollution prevention team. Each plan shall identify a specific individual or individuals within the facility organization as members of a storm water pollution prevention team that are responsible for developing the storm water pollution prevention plan and assisting the facility or plant manager in its implementation, maintenance, and revision. The plan shall clearly identify the responsibilities of each team member. The activities and responsibilities of the team shall address all aspects of the facility's storm water pollution prevention plan.

b. Description of potential pollutant sources. Each plan shall provide a description of potential sources which may reasonably be expected to add significant amounts of pollutants to storm water discharges or which may result in the discharge of pollutants during dry weather from separate storm sewers draining the facility. Each plan shall identify all activities and significant materials which may potentially be significant pollutant sources. Each plan shall include, at a minimum:

(1) Drainage. A site map indicating an outline of the portions of the drainage area of each storm water outfall that are within the facility boundaries, each existing structural control measure to reduce pollutants in storm water runoff, surface water bodies, locations where significant materials are exposed to precipitation, locations where major spills or leaks identified under Part II G 4 b (3) have occurred, and the locations of the following activities: fueling stations; vehicle and equipment maintenance and/or cleaning areas; loading/unloading areas; bag house or other dust control device, recycle/sedimentation pond, clarifier or other device used for the treatment of process wastewater, and the areas that drain to the treatment device, locations used for the storage or disposal of wastes; liquid storage tanks; processing areas; and storage areas. The map must indicate the outfall locations and the types of discharges contained in the drainage areas of the outfalls; and for each area of the facility that generates storm water discharges associated with industrial activity with a reasonable potential for containing significant amounts of pollutants, a prediction of the direction of flow, and an identification of the types of pollutants which are likely to be present in storm water discharges associated with industrial activity. Factors to consider include the toxicity of the chemicals; quantity of chemicals used, produced or discharged; the likelihood of contact with storm water; and history of significant leaks or spills of toxic or hazardous pollutants. Flows with a significant potential for causing erosion shall be identified.

(2) Inventory of exposed materials. An inventory of the types of materials handled at the site that potentially may be exposed to precipitation. Such inventory shall include a narrative description of significant materials that have been handled, treated, stored or disposed in a manner to allow exposure to storm water between the time of three years prior to the date of coverage under this general permit and the present; method and location of on-site storage or disposal; materials management practices employed to minimize contact of materials with storm water runoff between the time of three years prior to the date of coverage under this general permit and the present; the location and a description of existing structural and nonstructural control measures to reduce pollutants in storm water runoff; and a description of any treatment the storm water receives.

(3) Spills and leaks. A list of significant spills and significant leaks of toxic or hazardous pollutants that occurred at areas that are exposed to precipitation or that otherwise drain to a storm water conveyance at the facility after the date of three years prior to the date of coverage under this general permit. Such list shall be updated as appropriate during the term of the permit.

(4) Sampling data. A summary of existing discharge sampling data describing pollutants in storm water discharges from the facility, including a summary of sampling data collected during the term of this permit.

(5) Risk identification and summary of potential pollutant sources. A narrative description of the potential pollutant sources from the following activities: loading and unloading operations; outdoor storage activities; outdoor manufacturing or processing activities; significant dust or particulate generating processes; and on-site waste disposal practices. The description shall specifically list any significant potential source of pollutants at the site and for each potential source, any pollutant or pollutant parameter (e.g., biochemical oxygen demand, etc.) of concern shall be identified.

c. Measures and controls. Each facility covered by this permit shall develop a description of storm water management controls appropriate for the facility, and implement such controls. The appropriateness and priorities of controls in a plan shall reflect identified potential sources of pollutants at the facility. The description of storm water management controls shall address the following minimum components, including a schedule for implementing such controls:

(1) Good housekeeping. Good housekeeping requires the clean and orderly maintenance of areas that may contribute pollutants to storm water discharges. Particular attention should be paid to areas where raw materials are stockpiled, material handling areas, storage areas, liquid storage tanks and loading/unloading areas. The plan shall describe procedures performed to minimize the discharge of: spilled cement, aggregate (including sand and gravel), fly ash, settled dust, or other significant material in storm water from paved portions of the site that are exposed to storm water. Regular sweeping or other equivalent measures to minimize the presence of these materials shall be employed. The frequency of sweeping or equivalent measures shall be specified in the plan based upon a consideration of the amount of industrial activity occurring in the areas and the frequency of precipitation, but it shall be a minimum of once a week if cement, aggregate, kiln dust, fly ash or settled dust are being handled/processed. Where practicable, efforts must be made to prevent the exposure of fine granular solids (cement, fly ash, etc.) to storm water by storing these materials in enclosed silos/hoppers, buildings or under other covering.

(2) Preventive maintenance. A preventive maintenance program shall involve timely inspection and maintenance of storm water management devices (e.g., cleaning oil/water separators, catch basins) inspecting and testing facility equipment and systems to uncover conditions that could cause breakdowns or failures resulting in discharges of pollutants to surface waters, and appropriate maintenance of such equipment and systems.

(3) Spill prevention and response procedures. Areas where potential spills which can contribute pollutants to storm water discharges can occur, and their accompanying drainage points shall be identified clearly in the storm water pollution prevention plan. Where appropriate, specifying material handling procedures, storage requirements, and use of equipment such as diversion valves in the plan should be considered. Procedures for cleaning up spills shall be identified in the plan and made available to the appropriate personnel. The necessary equipment to implement a clean up should be available to personnel.

(4) Routine facility inspections. Facility personnel who are familiar with the industrial activity, the BMPs and the storm water pollution prevention plan shall be identified to inspect designated equipment and areas of the facility. Inspections shall be conducted while the facility is in operation and include, but are not limited to, the following areas exposed to storm water: material handling areas, above ground storage tanks, hoppers or silos, dust collection/containment systems, and truck wash down/equipment cleaning areas. The inspection frequency shall be specified in the plan based on a consideration of the level of industrial activity at the facility, but it shall be a minimum of quarterly unless more frequent intervals are specified elsewhere in the permit. A set of tracking or followup procedures shall be used to ensure that appropriate actions are taken in response to the inspections. Records of inspections shall be maintained with the pollution prevention plan.

(5) Employee training. Employee training programs shall inform personnel responsible for implementing activities identified in the storm water pollution prevention plan or otherwise responsible for storm water management at all levels of responsibility of the components and goals of the storm water pollution prevention plan. Training should address topics such as spill response, good housekeeping and material management practices. A pollution prevention plan shall identify periodic dates for such training.

(6) Recordkeeping and internal reporting procedures. A description of incidents such as spills, or other discharges, along with other information describing the quality and quantity of storm water discharges shall be included in the plan. Inspections and

maintenance activities shall be documented and records of such activities shall be incorporated into the plan.

(7) Sediment and erosion control. The plan shall identify areas which, due to topography, activities, or other factors, have a high potential for significant soil erosion, and identify structural, vegetative, and/or stabilization measures to be used to limit erosion.

(8) Management of runoff. The plan shall contain a narrative consideration of the appropriateness of traditional storm water management practices (practices other than those which control the generation or source(s) of pollutants) used to divert, infiltrate, reuse, or otherwise manage storm water runoff in a manner that reduces pollutants in storm water discharges from the site. The plan shall provide that measures that the permittee determines to be reasonable and appropriate shall be implemented and maintained. The potential of various sources at the facility to contribute pollutants to storm water discharges associated with industrial activity shall be considered when determining reasonable and appropriate measures. Appropriate measures may include: vegetative swales and practices, reuse of collected storm water (such as for a process or as an irrigation source), inlet controls (such as oil/water separators), snow management activities, infiltration devices, wet detention/retention devices; or other equivalent measures.

d. Comprehensive site compliance evaluation. Qualified facility personnel who are familiar with the industrial activity, the BMPs and the storm water pollution prevention plan shall conduct site compliance evaluations at appropriate intervals specified in the plan, but, in no case less than once a year. Such evaluations shall include the following:

(1) Areas contributing to a storm water discharge associated with industrial activity shall be visually inspected for evidence of, or the potential for, pollutants entering the drainage system. Measures to reduce pollutant loadings shall be evaluated to determine whether they are adequate and properly implemented in accordance with the terms of the permit or whether additional control measures are needed. Structural storm water management measures, sediment and erosion control measures, and other structural pollution prevention measures identified in the plan shall be observed to ensure that they are operating correctly. A visual inspection of equipment needed to implement the plan, such as spill response equipment, shall be made.

(2) Based on the results of the evaluation, the description of potential pollutant sources identified in the plan in accordance with Part II G 4 b and pollution prevention measures and controls identified in the plan in accordance with Part II G 4 c shall be revised as appropriate within two weeks of such evaluation and shall provide for implementation of any changes to the plan in a timely manner, but in no case more than 12 weeks after the evaluation.

(3) A report summarizing the scope of the inspection, personnel making the inspection, the date(s) of the inspection, major observations relating to the implementation of the storm water pollution prevention plan, and actions taken in accordance with Part II G 4 d shall be made and retained as part of the storm water pollution prevention plan as required in Part III B. The report shall identify any incidents of noncompliance. Where a report does not identify any incidents of noncompliance, the report shall contain a certification that the facility is in compliance with the storm water pollution prevention plan and this permit. The report shall be signed in accordance with Part III K.

(4) Where compliance evaluation schedules overlap with inspections required under Part II G 4 c (4), the compliance evaluation may be conducted in place of one such inspection.

5. Special pollution prevention plan requirements:

a. Additional requirements for storm water discharges associated with industrial activity from facilities subject to §313 of the Emergency Planning and Community Right-to-Know Act of 1986 (EPCRA) reporting requirements. Potential pollutant sources for which the facility has reporting requirements under EPCRA 313 must be identified in the summary of potential pollutant sources as per Part II G 4 b.

b. Additional requirements for salt storage. Storage piles of salt used for deicing or other commercial or industrial purposes must be enclosed or covered to prevent exposure to precipitation (except for exposure resulting from adding or removing materials from the pile). Piles do not need to be enclosed or covered where storm water from the pile is not discharged to surface waters or the discharges from the piles are authorized under another permit.

Part III.
Conditions Applicable To All VPDES Permits.

A. Monitoring.

1. Samples and measurements taken as required by this permit shall be representative of the monitored activity.
2. Monitoring shall be conducted according to procedures approved under 40 CFR Part 136 or alternative methods approved by the U.S. Environmental Protection Agency unless other procedures have been specified in this permit.
3. The permittee shall periodically calibrate and perform maintenance procedures on all monitoring and analytical instrumentation at intervals that will ensure accuracy of measurements.

B. Records.

1. Records of monitoring information shall include:
 - a. The date, exact place, and time of sampling or measurements;
 - b. The individuals who performed the sampling or measurements;
 - c. The dates and times analyses were performed;
 - d. The individuals who performed the analyses;
 - e. The analytical techniques or methods used; and
 - f. The results of such analyses.
2. Except for records of monitoring information required by this permit related to the permittee's sewage sludge use and disposal activities, which shall be retained for a period of at least five years, the permittee shall retain (i) records of all monitoring information including all calibration and maintenance records and all original strip chart recordings for continuous monitoring instrumentation, (ii) copies of all reports required by this permit, and (iii) records of all data used to complete the registration statement for this permit for a period of at least three years from the date of the sample, measurement, report or request for coverage. This period of retention shall be extended automatically during the course of any unresolved litigation regarding the regulated activity or regarding control standards applicable to the permittee, or as requested by the board.

C. Reporting monitoring results.

1. The permittee shall submit the results of the monitoring required by this permit not later than the 10th day of the month after monitoring takes place, unless another reporting schedule is specified elsewhere in this permit. Monitoring results shall be submitted to the department's regional office.
2. Monitoring results shall be reported on a Discharge Monitoring Report (DMR) or on forms provided, approved or specified by the department.
3. If the permittee monitors any pollutant specifically addressed by this permit more frequently than required by this permit using test procedures approved under 40 CFR Part 136 or using other test procedures approved by the U.S. Environmental Protection Agency or using procedures specified in this permit, the results of this monitoring shall be included in the calculation and reporting of the data submitted in the DMR or reporting form specified by the department.
4. Calculations for all limitations which require averaging of measurements shall utilize an arithmetic mean unless otherwise specified in this permit.

D. Duty to provide information. The permittee shall furnish to the department, within a reasonable time, any information which the board may request to determine whether cause exists for modifying, revoking and reissuing, or terminating this permit or to determine compliance with this permit. The board may require the permittee to furnish, upon request, such

plans, specifications, and other pertinent information as may be necessary to determine the effect of the wastes from his discharge on the quality of state waters, or such other information as may be necessary to accomplish the purposes of the State Water Control Law. The permittee shall also furnish to the department upon request copies of records required to be kept by this permit.

E. Compliance schedule reports. Reports of compliance or noncompliance with, or any progress reports on, interim and final requirements contained in any compliance schedule of this permit shall be submitted no later than 14 days following each schedule date.

F. Unauthorized discharges. Except in compliance with this permit, or another permit issued by the board, it shall be unlawful for any person to:

1. Discharge into state waters sewage, industrial wastes, other wastes, or any noxious or deleterious substances; or
2. Otherwise alter the physical, chemical or biological properties of such state waters and make them detrimental to the public health, or to animal or aquatic life, or to the use of such waters for domestic or industrial consumption, for recreation, or for other uses.

G. Reports of unauthorized discharges. Any permittee who discharges or causes or allows a discharge of sewage, industrial waste, other wastes or any noxious or deleterious substance into or upon state waters in violation of Part III F; or who discharges or causes or allows a discharge that may reasonably be expected to enter state waters in violation of Part III F, shall notify the department of the discharge immediately upon discovery of the discharge, but in no case later than 24 hours after said discovery. A written report of the unauthorized discharge shall be submitted to the department, within five days of discovery of the discharge. The written report shall contain:

1. A description of the nature and location of the discharge;
2. The cause of the discharge;
3. The date on which the discharge occurred;
4. The length of time that the discharge continued;
5. The volume of the discharge;
6. If the discharge is continuing, how long it is expected to continue;
7. If the discharge is continuing, what the expected total volume of the discharge will be; and
8. Any steps planned or taken to reduce, eliminate and prevent a recurrence of the present discharge or any future discharges not authorized by this permit.

Discharges reportable to the department under the immediate reporting requirements of other regulations are exempted from this requirement.

H. Reports of unusual or extraordinary discharges. If any unusual or extraordinary discharge including a bypass or upset should occur from a treatment works and the discharge enters or could be expected to enter state waters, the permittee shall promptly notify, in no case later than 24 hours, the department by telephone after the discovery of the discharge. This notification shall provide all available details of the incident, including any adverse affects on aquatic life and the known number of fish killed. The permittee shall reduce the report to writing and shall submit it to the department within five days of discovery of the discharge in accordance with Part III I 2. Unusual and extraordinary discharges include but are not limited to any discharge resulting from:

1. Unusual spillage of materials resulting directly or indirectly from processing operations;
2. Breakdown of processing or accessory equipment;
3. Failure or taking out of service some or all of the treatment works; and

4. Flooding or other acts of nature.

I. Reports of noncompliance. The permittee shall report any noncompliance which may adversely affect state waters or may endanger public health.

1. An oral report shall be provided within 24 hours from the time the permittee becomes aware of the circumstances. The following shall be included as information which shall be reported within 24 hours under this subdivision:

- a. Any unanticipated bypass; and
- b. Any upset which causes a discharge to surface waters.

2. A written report shall be submitted within five days and shall contain:

- a. A description of the noncompliance and its cause;
- b. The period of noncompliance, including exact dates and times, and if the noncompliance has not been corrected, the anticipated time it is expected to continue; and
- c. Steps taken or planned to reduce, eliminate, and prevent reoccurrence of the noncompliance.

The board may waive the written report on a case-by-case basis for reports of noncompliance under Part III I if the oral report has been received within 24 hours and no adverse impact on state waters has been reported.

3. The permittee shall report all instances of noncompliance not reported under Parts III I 1 or 2, in writing, at the time the next monitoring reports are submitted. The reports shall contain the information listed in Part III I 2.

NOTE: The immediate (within 24 hours) reports required in Parts III G, H and I may be made to the department's regional office by telephone or by fax. For reports outside normal working hours, leave a message and this shall fulfill the immediate reporting requirement. For emergencies, the Virginia Department of Emergency Services maintains a 24 hour telephone service at 1-800-468-8892.

J. Notice of planned changes.

1. The permittee shall give notice to the department as soon as possible of any planned physical alterations or additions to the permitted facility. Notice is required only when:

- a. The permittee plans alteration or addition to any building, structure, facility, or installation from which there is or may be a discharge of pollutants, the construction of which commenced:

(1) After promulgation of standards of performance under §306 of Clean Water Act which are applicable to such source; or

(2) After proposal of standards of performance in accordance with §306 of Clean Water Act which are applicable to such source, but only if the standards are promulgated in accordance with §306 within 120 days of their proposal;

- b. The alteration or addition could significantly change the nature or increase the quantity of pollutants discharged. This notification applies to pollutants which are subject neither to effluent limitations nor to notification requirements specified elsewhere in this permit; or

- c. The alteration or addition results in a significant change in the permittee's sludge use or disposal practices, and such alteration, addition, or change may justify the application of permit conditions that are different from or absent in the existing permit, including notification of additional use or disposal sites not reported during the permit application process or not reported pursuant to an approved land application plan.

2. The permittee shall give advance notice to the department of any planned changes in the permitted facility or activity which may result in noncompliance with permit requirements.

K. Signatory requirements.

1. Registration statements. All registration statements shall be signed as follows:

a. For a corporation: by a responsible corporate officer. For the purpose of this section, a responsible corporate officer means (i) president, secretary, treasurer, or vice-president of the corporation in charge of a principal business function, or any other person who performs similar policy- or decision-making functions for the corporation or (ii) the manager of one or more manufacturing, production, or operating facilities provided the manager is authorized to make management decisions that govern the operation of the regulated facility including having the explicit or implicit duty of making major capital investment recommendations, and initiating and directing other comprehensive measures to assure long-term environmental compliance with environmental laws and regulations; the manager can ensure that the necessary systems are established or actions taken to gather complete and accurate information for permit application requirements; and where if authority to sign documents has been assigned or delegated to the manager in accordance with corporate procedures;

b. For a partnership or sole proprietorship: by a general partner or the proprietor, respectively; or

c. For a municipality, state, federal, or other public agency: by either a principal executive officer or ranking elected official. For purposes of this section, a principal executive officer of a public agency includes (i) the chief executive officer of the agency or (ii) a senior executive officer having responsibility for the overall operations of a principal geographic unit of the agency.

2. Reports, etc. All reports required by permits, and other information requested by the board shall be signed by a person described in Part III K 1, or by a duly authorized representative of that person. A person is a duly authorized representative only if:

a. The authorization is made in writing by a person described in Part III K 1;

b. The authorization specifies either an individual or a position having responsibility for the overall operation of the regulated facility or activity such as the position of plant manager, operator of a well or a well field, superintendent, position of equivalent responsibility, or an individual or position having overall responsibility for environmental matters for the company. A duly authorized representative may thus be either a named individual or any individual occupying a named position; and

c. The written authorization is submitted to the department.

3. Changes to authorization. If an authorization under Part III K 2 is no longer accurate because a different individual or position has responsibility for the overall operation of the facility, a new authorization satisfying the requirements of Part III K 2 shall be submitted to the department prior to or together with any reports, or information to be signed by an authorized representative.

4. Certification. Any person signing a document under Parts III K 1 or 2 shall make the following certification:

"I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant

penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations."

L. Duty to comply. The permittee shall comply with all conditions of this permit. Any permit noncompliance constitutes a violation of the State Water Control Law and the Clean Water Act, except that noncompliance with certain provisions of this permit may constitute a violation of the State Water Control Law but not the Clean Water Act. Permit noncompliance is grounds for enforcement action; for permit termination, revocation and reissuance, or modification; or denial of a permit renewal application.

The permittee shall comply with effluent standards or prohibitions established under §307(a) of the Clean Water Act for toxic pollutants and with standards for sewage sludge use or disposal established under §405(d) of the Clean Water Act within the time provided in the regulations that establish these standards or prohibitions or standards for sewage sludge use or disposal, even if this permit has not yet been modified to incorporate the requirement.

M. Duty to reapply. If the permittee wishes to continue an activity regulated by this permit after the expiration date of this permit, the permittee shall apply for and obtain a new permit. All permittees with a currently effective permit shall submit a new application at least 180 days before the expiration date of the existing permit, unless permission for a later date has been granted by the board. The board shall not grant permission for applications to be submitted later than the expiration date of the existing permit.

N. Effect of a permit. This permit does not convey any property rights in either real or personal property or any exclusive privileges, nor does it authorize any injury to private property or invasion of personal rights, or any infringement of federal, state or local law or regulations.

O. State law. Nothing in this permit shall be construed to preclude the institution of any legal action under, or relieve the permittee from any responsibilities, liabilities, or penalties established pursuant to any other state law or regulation or under authority preserved by §510 of the Clean Water Act. Except as provided in permit conditions on "bypassing" (Part III U), and "upset" (Part III V) nothing in this permit shall be construed to relieve the permittee from civil and criminal penalties for noncompliance.

P. Oil and hazardous substance liability. Nothing in this permit shall be construed to preclude the institution of any legal action or relieve the permittee from any responsibilities, liabilities, or penalties to which the permittee is or may be subject under §§62.1-44.34:14 through 62.1-44.34:23 of the State Water Control Law.

Q. Proper operation and maintenance. The permittee shall at all times properly operate and maintain all facilities and systems of treatment and control (and related appurtenances) which are installed or used by the permittee to achieve compliance with the conditions of this permit. Proper operation and maintenance also includes effective plant performance, adequate funding, adequate staffing, and adequate laboratory and process controls, including appropriate quality assurance procedures. This provision requires the operation of back-up or auxiliary facilities or similar systems which are installed by the permittee only when the operation is necessary to achieve compliance with the conditions of this permit.

R. Disposal of solids or sludges. Solids, sludges or other pollutants removed in the course of treatment or management of pollutants shall be disposed of in a manner so as to prevent any pollutant from such materials from entering state waters.

S. Duty to mitigate. The permittee shall take all reasonable steps to minimize or prevent any discharge or sludge use or disposal in violation of this permit which has a reasonable likelihood of adversely affecting human health or the environment.

T. Need to halt or reduce activity not a defense. It shall not be a defense for a permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit.

U. Bypass.

1. "Bypass" means the intentional diversion of waste streams from any portion of a treatment facility. The permittee may allow any bypass to occur which does not cause effluent limitations to be exceeded, but only if it also is for essential maintenance to assure efficient operation. These bypasses are not subject to the provisions of Parts III U 2 and U 3.
2. Notice.
 - a. Anticipated bypass. If the permittee knows in advance of the need for a bypass, prior notice shall be submitted, if possible at least 10 days before the date of the bypass.
 - b. Unanticipated bypass. The permittee shall submit notice of an unanticipated bypass as required in Part III I.
3. Prohibition of bypass.
 - a. Bypass is prohibited, and the board may take enforcement action against a permittee for bypass, unless:
 - (1) Bypass was unavoidable to prevent loss of life, personal injury, or severe property damage;
 - (2) There were no feasible alternatives to the bypass, such as the use of auxiliary treatment facilities, retention of untreated wastes, or maintenance during normal periods of equipment downtime. This condition is not satisfied if adequate back-up equipment should have been installed in the exercise of reasonable engineering judgment to prevent a bypass which occurred during normal periods of equipment downtime or preventive maintenance; and
 - (3) The permittee submitted notices as required under Part III U 2.
 - b. The board may approve an anticipated bypass, after considering its adverse effects, if the board determines that it will meet the three conditions listed above in Part III U 3 a.

V. Upset.

1. An upset constitutes an affirmative defense to an action brought for noncompliance with technology based permit effluent limitations if the requirements of Part III V 2 are met. A determination made during administrative review of claims that noncompliance was caused by upset, and before an action for noncompliance, is not a final administrative action subject to judicial review.
2. A permittee who wishes to establish the affirmative defense of upset shall demonstrate, through properly signed, contemporaneous operating logs, or other relevant evidence that:
 - a. An upset occurred and that the permittee can identify the causes of the upset;
 - b. The permitted facility was at the time being properly operated;
 - c. The permittee submitted notice of the upset as required in Part III I; and
 - d. The permittee complied with any remedial measures required under Part III S.
3. In any enforcement proceeding the permittee seeking to establish the occurrence of an upset has the burden of proof.

W. Inspection and entry. The permittee shall allow the director, or his designee, upon presentation of credentials and other documents as may be required by law, to:

1. Enter upon the permittee's premises where a regulated facility or activity is located or conducted, or where records must be kept under the conditions of this permit;
2. Have access to and copy at reasonable times any records that must be kept under the conditions of this permit;

3. Inspect at reasonable times any facilities, equipment (including monitoring and control equipment), practices, or operations regulated or required under this permit; and
4. Sample or monitor at reasonable times, for the purposes of assuring permit compliance or as otherwise authorized by the Clean Water Act and the State Water Control Law, any substances or parameters at any location.

For purposes of this section, the time for inspection shall be deemed reasonable during regular business hours, and whenever the facility is discharging. Nothing contained herein shall make an inspection unreasonable during an emergency.

X. Permit actions. Permits may be modified, revoked and reissued, or terminated for cause. The filing of a request by the permittee for a permit modification, revocation and reissuance, or termination, or a notification of planned changes or anticipated noncompliance does not stay any permit condition.

Y. Transfer of permits.

1. Permits are not transferable to any person except after notice to the department. Except as provided in Part III Y 2, a permit may be transferred by the permittee to a new owner or operator only if the permit has been modified or revoked and reissued, or a minor modification made, to identify the new permittee and incorporate such other requirements as may be necessary under the State Water Control Law and the Clean Water Act.
2. As an alternative to transfers under Part III Y 1, this permit may be automatically transferred to a new permittee if:
 - a. The current permittee notifies the department at least 30 days in advance of the proposed transfer of the title to the facility or property;
 - b. The notice includes a written agreement between the existing and new permittees containing a specific date for transfer of permit responsibility, coverage, and liability between them; and
 - c. The board does not notify the existing permittee and the proposed new permittee of its intent to modify or revoke and reissue the permit. If this notice is not received, the transfer is effective on the date specified in the agreement mentioned in Part III Y 2 b.

Z. Severability. The provisions of this permit are severable, and if any provision of this permit or the application of any provision of this permit to any circumstance is held invalid, the application of such provision to other circumstances, and the remainder of this permit, shall not be affected thereby.

9VAC25-193-80. [Repealed]

FORMS

Department of Environmental Quality Water Division Permit Application Fee

DOCUMENTS INCORPORATED BY REFERENCE

Standard Industrial Classification Manual, 1987, Office of Management and Budget.

Standard Methods for the Examination of Water and Wastewater, 18th, 19th, 20th and 21st Editions, 1992, 1995, 1998 and 2005, American Public Health Association.

Method 8270D, Semivolatile Organic Compounds by Gas Chromatography/Mass Spectrometry (GC/MS), Revision 4, February 2007, U.S. Government Printing Office.

Method 8015C, Nonhalogenated Organics Using GC/FID, Revision 3, February 2007, U.S. Government Printing Office.

Modified DRO Method for Determining Diesel Range Organics, PUBL-SW-141, September 1995, Wisconsin Department of Natural Resources.

ATTACHMENT B

Fact Sheet

FACT SHEET
REISSUANCE OF A GENERAL VPDES PERMIT
FOR CONCRETE PRODUCTS INDUSTRIAL CATEGORY

The Virginia State Water Control Board has under consideration the reissuance of a general VPDES permit for point source discharges from the concrete products industrial category to surface waters.

Permit Number: VAG11

Name of Permittee: Any owner of a concrete products facility in the Commonwealth of Virginia agreeing to be regulated under the terms of this general permit.

Facility Location: Commonwealth of Virginia

Receiving Stream: Surface waters within the boundaries of the Commonwealth of Virginia, except those specifically named in Board Regulations and Policies which prohibit such discharges. Discharge to surface waters may be through a municipal separate storm sewer system.

The Virginia State Water Control Board has under consideration the reissuance of the general VPDES permit for point source discharges from the concrete products industrial category to surface waters. This permit covers the Standard Industrial Classification (SIC) Codes 3271 (Concrete Block and Brick) and 3272 (Concrete Products, Except Block and Brick). The permit regulation was modified on February 8, 2006 to include SIC codes 3271 and 3272. This permit will be effective October 1, 2008 and will expire on September 30, 2013.

All pertinent information is on file and may be inspected, and arrangements made for copying by contacting Elleanore Daub at:

Virginia Department of Environmental Quality
P.O. Box 1105
Richmond, Virginia 23218
TEL: (804) 698-4111
FAX: (804) 698-4032
E-mail: emdaub@deq.virginia.gov

Activities Covered by this General Permit and Process Descriptions

This general permit will cover point source discharges of process wastewaters and storm water runoff associated with the operation of concrete products facilities where the primary industrial activity is classified as Standard Industrial Classification (SIC) Codes 3271, 3272 and 3273. Coverage also includes temporary or portable ready-mixed plants erected on or near construction sites. This general permit does not exclude the coverage for a concrete product facility with a secondary industrial activity co-located on site as long as the secondary activity does not generate any point source discharges. In 2006, the general permit regulation was amended to include SIC Codes 3271 (Concrete Block and Brick) and 3272 (Concrete Products, Except Block and Brick) in addition to 3273 (Ready Mix).

SIC 3273 - Ready-mix

Ready-mixed concrete is basically produced by two methods: dry batch mixing and central mixing. For dry batch mixing, the mix of cement and aggregate is weighed and transferred in a dry state to the truck along with a proportioned amount of water. The concrete is mixed in the truck on the way to the job. For central mixing, the concrete is prepared in a central mixer then transferred to a truck mixer or agitator for delivery.

In addition to cement, fly ash and aggregate, ready-mixed concrete typically contains admixtures and entrained air. Entrained air improves resistance to freezing and thawing. Admixtures may include calcium chloride, triethanolamine, calcium salt, lignosulfonic acid, vinsol, saponin, keratin, sulfonated hydrocarbon, fatty acid glyceride, vinyl acetate, and styrene copolymer of vinyl acetate as ingredients. These compounds may be added to obtain desired characteristics, such as slower or more rapid curing times.

Generally, there are two types of ready-mixed concrete plants: permanent (also known as stationary) and temporary which are usually portable. A permanent plant usually produces various types of concrete for numerous customers. The permanent plant may operate either as a dry batch mixing plant or central mixing plant. A large facility may even consist of both processes. Portable plants are used on large highway and airport paving jobs. These plants can operate using either dry batch mixing or central mixing. Portable plants have the same significant materials and industrial activities as permanent facilities. Therefore, portable plants are covered under this general permit.

The wastewater discharge from ready-mixed concrete plants includes truck washout, truck wash-off, central mixer washout, storm water runoff, and noncontact cooling water from geothermal system or other such

systems. Process wastewater is generated by the cleaning of trucks and equipment that come in contact with cement and "wet" concrete. Trucks are usually washed on the outside after they are loaded with fresh concrete, before leaving the plant. They are also washed inside and out at the end of the day. Washing down of areas where this cleaning takes place also generates process wastewater. Process wastewater can also be generated from engine steam cleaning in the vehicle/equipment maintenance shop. Discharges of process wastewater may contain some storm water associated with industrial activity which has come in contact with raw material stockpiles, dried waste concrete, or vehicle parking or maintenance areas. The storm water can be contaminated at the truck loading site and at the truck washing area.

Treatment or control of process wastewater and commingled storm water usually consists of settling basins to reduce the solids content and acid addition to neutralize the high pH of the wastewater. Solids removal may be accomplished through a series of settling ponds or sloped slab separation basins. Mechanical clarification devices such as screw washers are used by some facilities to recover coarse aggregate and sand for reuse. The clarified wastewater may be completely or partially recycled and reused. When discharge is necessary, pH neutralization often is required prior to discharge. Mode of discharge can be batch or continuous.

Another source of wastewater at ready-mixed concrete plants is noncontact cooling water from a geothermal system or other such systems. This water may be from a groundwater well or potable water supply. The water is used to raise the temperature of concrete make up water in winter and lower it in summer. The temperature control system operates so that the cooling water does not come in direct contact with the concrete or the raw materials. Once the heat transfer has taken place, the water may be discharged or returned to the system for recycle. Noncontact cooling water may be commingled with process wastewater or discharged through a separate outfall. At the time of reissuance, it is believed that very few, if there is any, facilities currently employ such system to adjust the temperatures of concrete make up water.

Storm water associated with industrial activity that is not combined with process wastewater or noncontact cooling water may be discharged from ready-mixed concrete plants. This storm water may have come in contact with or been exposed to raw material (sand, gravel or stone) stockpiles, dried waste concrete, or vehicle parking or maintenance areas. Fugitive dust is prevalent on the grounds at concrete plants. Shrouds and vacuum recovery units are used to minimize dust releases at concrete mixing and truck loading locations. Cement and aggregate unloading from railroad cars, trucks or barges is another potential source of contamination for storm water. No treatment is normally employed prior to such discharge. Some facilities store the storm water in a retention pond and operate the basin in a "no-discharge" mode. The water collected in the retention pond either evaporates, infiltrates, or is used as process water on site.

SIC 3272 - Concrete Products, Except Block and Brick

Concrete Products, Except Block and Brick include concrete pipe, precast concrete products, and prestressed concrete products.

Concrete Pipe. Concrete pipe products include: culvert pipe (reinforced and non-reinforced), storm sewer pipe (reinforced and non-reinforced), sanitary sewer pipe (reinforced and non-reinforced), pressure pipe (reinforced, prestressed, pretensioned and other pressure pipe), irrigation pipe and drain (tile), and other concrete pipe (e.g., manholes and conduits).

Concrete pipe is generally produced by three methods: (1) the vertical packerhead (tamping) method; (2) the vertical cast method; and (3) the spin casting production method. The vertical packerhead method uses a machine called a packerhead to compact and vibrate a moist concrete mix into a steel form. The method is used to produce pipe up to five feet in diameter. The vertical cast method is used to produce reinforced pipe. Due to labor cost and time, this method is generally limited to production of reinforced pipe over five feet in diameter. A wet concrete mix from a central mixer is transported by buckets and poured into a vertical steel form containing a reinforcing cage. The steel forms are stripped from the pipe after the concrete sets. The spin casting production method is used to produce reinforced pipe up to four feet in diameter. The form containing a reinforcing cage is placed horizontally and rotated at a high rate, while concrete is added by a reciprocating nozzle. The spinning action densifies the concrete on the inside of the form and dewateres it. The inner surface of the pipe is finished by a mechanical roller. Reinforced concrete pressure pipe, produced by spin casting, uses a hydraulically tested sheet steel cylinder form that remains as part of the finished pipe.

All concrete pipe is cured at ambient conditions or spray cured, until it reaches a certain green strength, at which time it is cured by low pressure steam either in a kiln or in a chamber constructed around the pipe. For pipe produced by the packerhead method, the forms are usually removed before steam curing, while for the vertical cast and spin casting methods the forms usually remain on the pipe during curing. In all cases except reinforced concrete pressure pipe, a form release oil is used. In the production of reinforced concrete pressure pipe additional processes include: hydraulic testing of the cylinder, wrapping the cured pipe with high strength steel

wire, and coating the steel wire wrap with concrete grout. There is no waste water from atmospheric curing. Waste water from steam curing and spray curing contains suspended solids, oil and grease and has a high pH.

Precast Concrete Products. Precast concrete products include: roof and floor units (slabs and tile; joints and beams); architectural wall panels; pilings, posts and poles; cast stone (products for architectural purposes); prefabricated building systems; other precast construction prod.; burial vaults and boxes; silo staves; septic tanks; dry-mixed concrete materials (e.g., Sakrete); other precast (e.g., laundry tubs).

Simple precast concrete products are produced by pouring the concrete from a mixer into steel forms, and allowing the product to cure, either at ambient conditions, with low pressure steam, or with a water spray. Curing takes place in two steps, first with the form on then off. The second curing step usually takes place at ambient conditions. Reinforced concrete products contain steel structural members to provide increased strength.

Precast architectural wall panels are generally finished to produce a decorative surface of exposed aggregate. For the most common production method, a retarder is spread in the form bottom, reinforcing steel is placed in the form, and the concrete mix is cast. When the concrete has set and the form is removed, the surface is washed with a weak acid solution, sandblasted, or washed with high pressure water to clean away the unset surface cement and expose the coarse aggregate. The panel is then cured completely in a storage yard.

Prestressed Concrete Products. Prestressed concrete products are chiefly used as structural and architectural components and include: single tees, double tees, and channels; piling, bearing piles, and sheet piles; bridge beams; solid and hollow cored slabs and panels; other prestressed products (e.g., arches); joist, girders, and beams (other than bridge beams).

Prestressed concrete products are produced in similar fashion as precast reinforced concrete products with the substitution of steel cables under tension instead of steel rods for reinforcement. Prestressed concrete products may be either pretensioned or post-tensioned.

The wastewater discharge from Concrete Products, Except Block and Brick facilities includes transport bucket and central mixer washout, form wash-off, condensate from steam curing, spray curing wastewater, surface finishing water, spin cast wash-water, pre-wetting of imbedded pressure pipe, storm water, boiler blowdown, noncontact cooling water from bearings and compressors, and miscellaneous equipment wash-off. Pollutants in the wastewater discharge include suspended solids, oil and grease, high pH, and COD.

SIC 3271 - Concrete Block and Brick

Concrete block and brick are classified into the following products: structural block produced with lightweight aggregate such as cinder, expanded shale, pumice or other materials; structural block produced with heavyweight aggregate such as sand, gravel, crushed stone or other materials; decorative block - such as screen block, split block, slump block and shadowal block; and concrete brick.

The manufacturing process for concrete block and brick consists of mixing, forming, and curing. Typically, the aggregate, cement and water are weighed and mixed in batches of about four cubic yards in a rotary mixer. The concrete mix used for production of block and brick contains less water than ready-mixed concrete. The type of aggregate being used will determine if a lightweight or heavyweight product is produced. Color may be added to the mix to produce decorative block. The mixed concrete is fed into an automatic block molding machine, where the moist mix is rammed, pressed or vibrated into the desired shape. Following forming, the material is stacked onto iron framework cars and allowed to cure. To produce a structural high-strength block within a reasonable time period, the block must be cured under moist conditions. The three basic methods of curing are: (1) atmospheric; (2) low pressure steam; and (3) autoclave or high pressure steam.

Atmospheric curing produces a lower strength block than the other two methods of curing. Atmospheric curing uses ambient heat and humidity, and heat of hydration to cure the block, and also includes curing within enclosures at ambient conditions. Curing usually takes place for about four hours. There are no additional wastewaters produced from this curing process.

In the low pressure steam method, the loaded curing cars are placed into a chamber or kiln where low pressure steam less than 150 psi is injected from perforated pipes for approximately 8-10 hours, depending on mix conditions, user specifications, and ambient temperature. Waste water from this curing method consists primarily of steam condensate, which contains some suspended solids, dissolved solids, COD, oil and grease and a high pH. The low pressure steam is generated by a boiler which requires periodic blowdown.

The autoclave or high pressure steam curing method produces a higher strength block with less shrinkage in less time than the low pressure steam curing method. For this method the curing cars are loaded in a large horizontal, cylindrically shaped autoclave where high pressure steam (greater than 150 psi) is injected or convected. After a curing cycle of about 8 hours the steam is released to the atmosphere and the blocks are removed and stored. An alternative method of steam production uses a hot oil convection method, where water

is placed in a trough within the autoclave and hot oil heats the water into steam. Following curing, the autoclave is allowed to cool and a portion of the steam condenses back into the trough. Periodically the trough water is discharged because the alkalinity, due to the pickup of calcium oxide, makes the water corrosive to the steel racks of the curing cars. Wastewater discharges from the autoclave curing process can include boiler blowdown, autoclave blowdown condensate, and autoclave purge. Pollutants include suspended solids, COD, oil and grease, and high pH, resulting from autoclave blowdown condensate and in the convection process, autoclave purge.

The primary source of wastewater from concrete block and brick facilities is equipment wash-off, including: delivery trucks, conveyor belts, transport buckets, central mixers and forms. Generally only suspended solids are a problem in this wastewater and can be handled with simple settling. Other potential sources of wastewater include: accidental spill wash-down, storm water runoff, and noncontact cooling of bearings and compressors. Spill wash-down and storm water runoff can be handled with other wash-waters. The noncontact cooling water (and other clean wastewater) can be used for mixing water makeup, aggregate moisture control, and yard dust control.

Part I A - Effluent Limitations, Monitoring Requirements and Their Basis

The permit retains the monitoring requirements and limits of the previous permit. The parameters to be limited in process wastewater discharges are pH, total suspended solids, total petroleum hydrocarbons (TPH), total residual chlorine (TRC) and temperature. These parameters were chosen based on the evaluation of 1992-1996 DMR data for the issuance of the first general 'ready-mix' permit in 1998. Heat, chlorine and ammonia will be pollutants of concern when noncontact cooling water is commingled with process wastewater prior to discharge. Limitation and monitoring requirements for temperature, total residual chlorine and ammonia remain in this general permit. Specific rationale for all parameters is discussed below.

1. Discharge of process wastewater which may contain input from the vehicle/equipment maintenance activities, and may be commingled with noncontact cooling water or storm water runoff:

<u>Parameter</u>	<u>Limitation</u>	<u>Frequency⁽⁶⁾</u>
Flow	No limit, estimate and report average and maximum values	
Total Suspended Solids	30 mg/l avg, 60 mg/l max.	
pH	6.0 minimum, 9.0 maximum ⁽¹⁾	
Total Petroleum Hydrocarbons ⁽²⁾	15 mg/l maximum	
Total Residual Chlorine ⁽³⁾	0.016 mg/l, avg. and max.	
Ammonia-N ⁽³⁾	No limit, report maximum value	
Temperature ⁽⁴⁾	Maximum ⁽⁵⁾	

(1) Where the Water Quality Standards (9 VAC 25-260) establish alternate standards for pH in the waters receiving the discharge, those standards shall be the maximum and minimum effluent limitations.

(2) Total Petroleum Hydrocarbons limitation and monitoring are only required where a discharge contains process wastewater generated from the vehicle/equipment maintenance activities. Total Petroleum Hydrocarbons shall be analyzed using the Wisconsin Department of Natural Resources Modified Diesel Range Organics Method as specified in Wisconsin publication SW-141 (1995), or by EPA SW-846 Method 8015C for diesel range organics, or by EPA SW-846 Method 8270D. If Method 8270D is used, the lab must report the combination of diesel range organics and polynuclear aromatic hydrocarbons.

(3) Chlorine limitation, and chlorine and ammonia monitoring are only required where a discharge includes cooling water that is chlorinated or contains chloramines. Ammonia monitoring applies only where the source of cooling water is disinfected using chloramines.

(4) Temperature limitation and monitoring are only required where a discharge contains cooling water.

(5) The effluent temperature shall not exceed a maximum 32 °C for discharges to non-tidal coastal and piedmont waters, 31 °C for mountain and upper piedmont waters, 21 °C for put and take trout waters, or 20 °C for natural trout waters. No maximum temperature limit applies to discharges to estuarine waters.

For estuarine waters, non-tidal coastal and piedmont waters, mountain and upper piedmont waters, and put and take trout waters, the effluent shall not cause an increase in temperature of the receiving stream of more than 3°C above the natural water temperature. For natural trout waters, the temperature of the effluent shall not cause an increase of 1 °C above natural water temperature. The effluent shall not cause the temperature in the receiving stream to change more than 2 °C per hour, except in the case of natural trout waters where the hourly temperature change shall not exceed 0.5 °C.

Natural temperature is defined as that temperature of a body of water (measured as the arithmetic average over one hour) due solely to natural conditions without the influence of any point-source discharge.

(6) Except for TPH, for a facility that was covered by the previous general permit, and reduced monitoring was granted and compliance demonstrated, monitoring frequency shall be 1/quarter. In all other cases, monitoring shall be once per month for the first year of permit coverage. If the first year results demonstrate full compliance, monitoring will be reduced to once per quarter. Should the permittee be issued a Warning Letter related to violation of effluent limitations, a Notice of Violation, or be the subject of an active enforcement action, monitoring frequency shall revert to 1/month, upon issuance of the letter or notice or initiation of the enforcement action, and remain in effect until the permit's expiration date. This requirement was added to address concerns of noncompliance that may occur after reduced monitoring was granted. For TPH, monitoring is required for once per 3 months. All samples are collected by grab, except for temperature, by immersion/stabilization.

Prior to issuing coverage under the reissued general permit, the staff should review the DMRs received after the reduced monitoring frequency was granted during the current permit term. If full compliance is demonstrated, the discharge is eligible for reduced monitoring frequency under the reissued general permit. Request for monitoring reduction should be initiated by the permittee and monitoring can only be reduced when the authorization is received from the regional office. In order to demonstrate compliance, it is anticipated that 12 data points will be gathered in the first year unless no discharge is reported in a particular month. Before granting reduced monitoring the permit writer should consult with the inspector to verify good operating practices at the facility and that an inspection has been conducted recently.

TSS

Although there are no water quality standards or federal effluent guidelines for total suspended solids for the industrial category covered by the general permit, the Department has decided that such limits are necessary for the protection of the receiving waters. The total suspended solids limitations are established at levels which, based on the Department's experience with individual VPDES permits, are achievable with conventional treatment technology and which will prevent the build-up of solids on the bottoms of receiving waters.

pH

The pH limitation is based upon Virginia's Water Quality Standards (9 VAC 25-260). Because the facility may discharge into the receiving water at zero low flow conditions, the limitation of the water quality standard on the effluent is appropriate.

TPH

Due to the concern that process wastewater generated from engine steam cleaning in the vehicle/equipment maintenance shop may carry petroleum-based pollutants (diesel range organics), this general permit proposes a TPH limitation of 15 mg/l for a discharge with such input. The TPH maximum limitation is based on the ability of simple oil/water separator equipment. Historically, oil and grease (O&G) limits have been placed in the VPDES permits for many facilities that handle petroleum products or where contamination by petroleum products is of concern. The O&G limits now are expressed as Total Petroleum Hydrocarbons (TPH) instead since there is little reason to expect fatty matter from plant and animal sources. Based on the recommendation provided by Guidance Memo # 96-002, a one to one ratio between O&G and TPH is assumed. The TPH testing protocols were updated during the 2003 general permit issuance and again in 2008.

TRC

The general permit contains a TRC limit in order to ensure that the Virginia Water Quality Standards (9 VAC 25-260-140) are maintained in the receiving waters regardless of the dilution available to the discharge. The TRC limit is derived in accordance with Guidance Memo #00-2011 Guidance on Preparing VPDES Permit Limits (Dated August 24, 2000) and the chlorine limit was revised in 2003 using this guidance. Implementation of the toxic standards including chlorine was updated through this guidance as a result of modifications to the Virginia Water Quality Standards (9 VAC 25-260) made at that time. A printout of the STATS program output is attached. TRC limitation and monitoring requirements are applicable where the source of cooling water is chlorinated.

Ammonia

The permit contains monitoring requirements for ammonia. Chloramines are common chemicals used for disinfection of drinking water. Ammonia is a by-product of chloramines use. Therefore, ammonia monitoring is required in cases where a discharge contains cooling water that is disinfected using chloramines as identified in the registration statement Item 2.G.a. The purpose is to collect data to evaluate whether the general permit is appropriate for such discharges and/or whether ammonia limits may be required in such discharges for the next reissuance of the general permit. This is consistent with the General VPDES Permit for Cooling Water Discharge (9 VAC 25-196).

All limits should be considered as two significant digits for compliance purposes as per special condition Part I.B.15. b.(4) and in accordance with Guidance Memo No. 06-2016 Significant Figures for Discharge Monitoring Reports.

2. Discharge of noncontact cooling water:

<u>Parameter</u>	<u>Limitation</u>
Flow	No limit, estimate and report average and maximum values
pH	6.0 minimum, 9.0 maximum ⁽¹⁾
Total Residual Chlorine ⁽²⁾	0.016 mg/l avg. and max.
Ammonia-N ⁽²⁾	No limit, report maximum value
Temperature	Maximum ⁽³⁾

(1) Where the Water Quality Standards (9 VAC 25-260) establish alternate standards for pH in the waters receiving the discharge, those standards shall be the maximum and minimum effluent limitations.

(2) Chlorine limitation and monitoring are only required where the source of cooling water is chlorinated. Ammonia monitoring applies only where the source of cooling water is disinfected using chloramines.

(3) The effluent temperature shall not exceed a maximum 32 °C for discharges to non-tidal coastal and piedmont waters, 31 °C for mountain and upper piedmont waters, 21 °C for put and take trout waters, or 20 °C for natural trout waters. No maximum temperature limit applies to discharges to estuarine waters.

For estuarine waters, non-tidal coastal and piedmont waters, mountain and upper piedmont waters, and put and take trout waters, the effluent shall not cause an increase in temperature of the receiving stream of more than 3°C above the natural water temperature. For natural trout waters, the temperature of the effluent shall not cause an increase of 1 °C above natural water temperature. The effluent shall not cause the temperature in the receiving stream to change more than 2 °C per hour, except in the case of natural trout waters where the hourly temperature change shall not exceed 0.5 °C.

Natural temperature is defined as that temperature of a body of water (measured as the arithmetic average over one hour) due solely to natural conditions without the influence of any point-source discharge.

(4) For a facility that was covered by the previous general permit, and reduced monitoring was granted and compliance demonstrated, monitoring frequency shall be 1/quarter. In all other cases, monitoring shall be once per month for the first year of permit coverage. If the first year results demonstrate full compliance, monitoring will be reduced to once per quarter. Should the permittee be issued a Warning Letter related to violation of effluent limitations, a Notice of Violation, or be the subject of an active enforcement action, monitoring frequency shall revert to 1/month, upon issuance of the letter or notice or initiation of the enforcement action, and remain in effect until the permit's expiration date. All samples are collected by grab, except for temperature, by immersion/stabilization.

pH

The pH limitation is based upon Virginia's Water Quality Standards (9 VAC 25-260). Because the facility may discharge into the receiving water at zero low flow conditions, the limitation of the water quality standard on the effluent is appropriate.

TRC and Ammonia

The general permit contains a TRC limit in order to ensure that the Virginia Water Quality Standards (9 VAC 25-260-140) are maintained in the receiving waters regardless of the dilution available to the discharge. The TRC limit is derived in accordance with Guidance Memo #00-2011 Guidance on Preparing VPDES Permit Limits (Dated August 24, 2000). A printout of the STATS program output is attached. TRC limitation and monitoring requirements are applicable where the source of cooling water is chlorinated. Ammonia monitoring is only required in cases where cooling water is disinfected using chloramines.

The primary pollutant associated with noncontact cooling water discharges is the heat taken up by the water. The general permit will limit temperature in these discharges so that the receiving waters will not exceed the maximum temperature established in the Water Quality Standards (9 VAC 25-260-50). The general permit also limits temperature in these discharges so that the rise above natural temperature and the maximum hourly temperature change in the receiving waters will not violate the Water Quality Standards (9 VAC 25-260-60, 70 and 80).

All limits should be considered as two significant digits for compliance purposes as per special condition Part I.B.15.b.(4) and in accordance with Guidance Memo No. 06-2016 Significant Figures for Discharge Monitoring Reports.

3. Discharge of storm water which does not combine with other process wastewaters or noncontact cooling water:

<u>Parameter</u>	<u>Limitation</u>
Flow	No limit, estimate volume discharged during entire monitored storm event
Total Petroleum Hydrocarbons ⁽¹⁾	No limit, report maximum value
Total Suspended Solids	No limit, report maximum value
Total Recoverable Iron	No limit, report maximum value
pH	No limit, report maximum & minimum values

(1) Total Petroleum Hydrocarbons shall be analyzed using the Wisconsin Department of Natural Resources Modified Diesel Range Organics Method as specified in Wisconsin publication SW-141 (1995), or by EPA SW-846 Method 8015C for diesel range organics, or by EPA SW-846 Method 8270D. If Method 8270D is used, the lab must report the combination of diesel range organics and polynuclear aromatic hydrocarbons.

Monitoring is required once per year by grab sample, collected during the first thirty minutes of the discharge. If during the first thirty minutes it was impracticable, then a grab sample shall be taken during the first hour of discharge.

Guidance on the conduct of storm water sampling is provided by the EPA in the document titled NPDES Storm Water Sampling Guidance Document, publication number EPA 833-B-92-001, July 1992.

Samples taken in compliance with the monitoring requirements specified above (A, B, and C) shall be taken at the outfall location(s) identified in the approved registration statement. In the cases where discharges to surface waters are through the municipal separate storm sewer systems, samples should be taken at the point where the discharge enters the municipal separate storm sewer system.

The monitoring requirements for storm water are consistent with the monitoring requirements of the original storm water general permits (1994) which were based on EPA's Baseline Industrial Activity Storm Water General Permit (1992). One difference is that oil and grease was replaced by total petroleum hydrocarbons. Historically, oil and grease (O&G) limits have been placed in the VPDES permits for many facilities that handle petroleum products or where contamination by petroleum products is of concern. The O&G monitoring requirement is expressed as Total Petroleum Hydrocarbons (TPH) instead since there is little reason to expect fatty matter from plant and animal sources. Based on the recommendation provided by Guidance Memo # 96-002, a one to one ratio between O&G and TPH is assumed. The TPH testing protocols were updated during the 2003 general permit issuance and compliance staff at DEQ have stated it is still an acceptable procedure.

In 2003, in order to maintain consistency with the EPA NPDES Storm Water Multi-Sector General Permit, total recoverable iron was added and chemical oxygen demand deleted from the parameter list for storm water discharges

Also added in 2003, a quarterly visual monitoring requirement. The deadline for annual monitoring report was also changed in 2003 to the tenth day of January of each year. Specific storm event data is required to be submitted with the DMR.

It is imperative for the protection of water quality in the streams receiving the storm water runoff from a concrete operation that appropriate storm water pollution prevention controls and practices be designed and implemented at these facilities. The permittees are required to demonstrate that they have implemented these controls and practices by monitoring discharges that are made up exclusively of storm water for pH, total petroleum hydrocarbons, total suspended solids and total recoverable iron once per year over the term of the permit. These parameters have been determined to be pollutants of concern in storm water from this industrial category. This monitoring requirement is consistent with the requirement for storm water monitoring at concrete plants that are covered under the EPA NPDES Storm Water Multi-Sector General Permit reissued on October 30, 2000.

All limits should be considered as two significant digits for compliance purposes as per special condition Part I.B.15. b.(4) and in accordance with Guidance Memo No. 06-2016 Significant Figures for Discharge Monitoring Reports.

Part I B - Special Conditions

1. Restriction of floating solids and visible foam discharges

This condition is required to implement the Water Quality Standards (9 VAC 25-260-20).

Restriction of solids deposition in surface water in the vicinity of the outfall as a result of the industrial activity. This requirement is due to concerns from staff of concrete and raw product residue entering the stream at some operations. Improved housekeeping on site should maintain this requirement.

2. Materials handling/storage

Raw materials and products are to be stored and handled so that any untreated discharge of pollutants to surface waters is prevented.

3. Vehicles and equipment maintenance

Vehicles and equipment used in the industrial activity are to be operated and maintained in a manner that prevents pollution of surface or ground waters. This special condition addresses best management practices for activities associated with vehicle maintenance that take place at a typical concrete products facility.

4. Restrictions of washing activities

All washdown and washout of trucks, mixers, transport buckets, forms or other equipment is restricted to the designated washdown and washout areas. Wastewater generated in this area is to be recycled or treated prior to discharge. The storage of raw materials and washing of trucks and other equipment are necessary aspects of concrete products facilities. These activities are allowed by the general permit as long as they are handled in a way that provides for treatment of any wastewater prior to discharge. This special condition is consistent with EPA's "concrete products facilities" requirement in their Industrial Storm Water General Permit and applies to all equipment that is washed out of product (not just trucks).

5. Restrictions of waste concrete reclamation

Waste concrete that returns to the plant is either reclaimed at the truck washing facility or it is dumped on the plant site for drying and later reclamation for off-site fill or road base. The general permit restricts this practice to a designated area and prohibits any untreated discharge from it to surface waters. Until this concrete is dry, this wet waste concrete should be in a designated area that drains to the settling basins, the wet concrete is completely contained and cannot reach the receiving stream (even during normal (not 25 year-24 hour storm event) rain events) or the facility operates in a 'no-discharge' mode (see special condition 11 below).

6. Prohibition of sewage discharge

The discharge of sewage is not permitted under the draft general permit. The limits of the permit do not address pollutants of concern in domestic sewage.

7. Prohibition of unapproved chemical usage and prior approval requirement for change of chemical usage for noncontact cooling water

In order to assure protection of water quality and beneficial uses of the waters receiving the discharge, the use of any chemical additives, except chlorine, without prior approval is prohibited under this general permit. The general permit contains a water quality-based chlorine limitation.

The chemical treatment that is employed in the geothermal or other system will be identified on the registration statement and evaluated before the facility is covered under the general permit. Prior approval shall be obtained from the DEQ before any changes are made to the chemical usage in the geothermal or other system, during the life of the permit term.

8. Operation and maintenance manual requirement

The permittee is required to develop and implement an Operation and Maintenance Manual which includes procedures and practices for the mitigation of pollutant discharges and for the protection of state waters from the facility's operations. This will document procedures for plant personnel so that the other special conditions can be met. Facilities covered under the previous general permit are to review and modify the existing O & M manual within 90 days. During those 90 days, the existing O&M manual shall continue to be implemented.

9. Notification of municipal separate storm sewer system

If the facility discharges through a municipal separate storm sewer system (MS4) to surface waters, the permittee must notify the owner of the storm sewer of the presence of the discharge and provide a copy of such notice to DEQ.

10. Freeboard requirement

The purpose of this special condition is to prevent overflow. A minimum freeboard of one foot for the treatment/storage system is required to be maintained except during a 72-hour transition period after a measurable rainfall event. The transition period will provide sufficient flexibility for proper operation and maintenance of the facility. During the transition period, no discharge from the basins and lagoons shall occur unless it is in accordance with this permit. Within 72 hours after a measurable rainfall event, the freeboard must return to the minimum freeboard of one foot. Where basins are operated in a series mode of operation, the one foot freeboard requirement for the upper basins may be waived provided the final basin will maintain the freeboard requirements

of this special condition. This reflects existing practice and design of these basins. It is deemed reasonable and protective since the additional treatment provided by series basins is preferred. A daily inspection requirement is added to ensure that freeboard is properly maintained. The inspection log is required to be kept onsite and be made available to DEQ upon request.

11. Requirement for "no discharge" mode operation

In the cases where either the process wastewater which may be commingled with noncontact cooling water or storm water runoff, or the storm water associated with industrial activity are retained in a treatment/storage system which operates in a "no-discharge" mode, this general permit prohibits any discharge of pollutants to surface waters from such system except in the case of a storm event which is greater than a 25 year-24 hour storm event. This special condition only applies to those operations which the permittee had designated as "no-discharge" in the accepted registration statement.

12. Notification levels

The permittee is required to report the discharge of any toxic pollutant from any activity that has occurred or will occur when that discharge, either on routine or non-routine basis, will exceed the highest of the listed notification levels. This condition is required by the VPDES Permit Regulation (9 VAC 25-31-200 A).

13. Liner requirements for the settling basins

In order to comply with the statutory mandate (State Water Control Law §62.1-44.15:5.2), House Bill 972 passed by the 1998 Session of the General Assembly and effective July 1, 1998, all settling basins, used for treatment and control of process wastewater and commingled storm water that were constructed on or after February 2, 1998, are required to be lined with concrete or any other impermeable materials prior to commencing operation. Concrete is the liner material of choice (as opposed to clay, for example) because settling basins are routinely shoveled out with heavy equipment. This requirement is not intended for basins constructed as best management practices for stormwater.

14. Reuse of treated wastewater for dust control

Reuse of wastewater for dust suppression has been a common practice for most of the concrete products facilities. This condition is to ensure that reuse of treated wastewater on site for the purposes of dust suppression is managed properly and no ponding or surface runoff will occur as a result of such activity, this condition is added to the general permit.

15. Compliance reporting

In accordance with Guidance Memo#00-2001, Amendment #3 and Guidance Memo 06-2016 (Significant Figures for Discharge Monitoring Reports, this special condition identifies the quantification levels for TRC and ammonia using two significant digits, and prescribes data handling protocols for the purposes of compliance reporting. In accordance with Guidance Memo 06-2016, the condition was ensures that the permittee reports discharge monitoring at two significant digits.

Part II Storm Water Management

Part II was reviewed for consistency with the EPA NPDES Storm Water Multi-Sector General Permit reissued on October 30, 2000 and all the sector-specific storm water pollution prevention plan requirements have been incorporated. These include drainage area site map, good housekeeping and routine inspections. Additional requirements for salt storage and storm water discharges associated with industrial activity from facilities subject to section 313 of the Emergency Planning and Community Right-to-Know Act of 1986 reporting requirements are also included.

Part II A - D

Reporting of specific storm event sampling data and representative discharge requirements remain the same in this draft permit with one addition made in D. under the requirements for quarterly visual examination of storm water quality. This new requirement is that the visual quality of the receiving stream (including observations of solids deposition or oil sheen from the industrial activity) in the vicinity of the storm water outfall (including ditches and conveyances) must also be reported. This requirement is added due to staff concerns of concrete product entering the stream at some operations and will be logged with the other visual information. These observations should be recorded in the receiving stream as well as any other conveyances to the stream that may allow migration of the product to the stream. It is believed that visual examination of these areas will provide a useful and inexpensive means for permittees to evaluate the effectiveness of their storm water pollution prevention plans (SWP3s) and make any necessary modifications in housekeeping to address the results of the visual examinations.

In the event of adverse weather conditions in paragraph C, a substitute sample must be collected in the next period and data be submitted along with the data for the routine sample in that period. Restriction for exercising the waiver to no more than once during the permit term has been lifted

Part II E

In order to be an allowable nonstorm water discharge, the sources of nonstorm water must be identified in the SWP3 and, except for flows from fire fighting activities, the plan must identify and ensure the implementation of appropriate pollution prevention measures for such discharges.

Part II F

Discharge of hazardous substances or oil from a facility must be eliminated or minimized in accordance with the SWP3 developed for this facility. Where a release containing a hazardous substance or oil in a reportable amount, the permittee must notify the Department as soon as possible. Where a release enters a MS4, the permittee must notify the owner of the MS4. In addition, the SWP3 must be reviewed to identify measure to prevent the reoccurrence of such releases and to respond to such releases, and the plan must be modified as needed.

Part II.G

For a proposed discharge, the plan shall be prepared and implemented prior to the date of submission of the registration statement. This information should be provided under the registration statement Item 6. For an existing discharge, the time frame for preparation and implementation of the plan is within 270 days from the date of coverage under this permit. A facility covered under the previous general permit is required to update the plan in order to comply with the new requirements of the reissued general permit. In cases where construction is needed to implement measures required by the plan, the general permit requires the plan contain a compliance schedule for no later than 3 years. In order to be consistent with EPA NPDES Storm Water Multi-Sector General Permit, the sector specific SWP3s requirements are incorporated into this general permit. These include drainage area site map, good housekeeping and routine inspections. Additional requirements for salt storage and storm water discharges associated with industrial activity from facilities subject to section 313 of the Emergency Planning and Community Right-to-Know Act of 1986 reporting requirements are also included.

Additional guidance on the development of the Storm Water Pollution Prevention Plan can be found in the EPA document titled Storm Water Management For Industrial Activities, Developing Pollution Prevention Plans and Best Management Practices, publication number EPA 832-R-92-006, September 1992.

Part III - General Permit Coverage

The general permit will have a fixed term of 5 years. Every authorization under this general permit will expire at the same time and all authorizations will be renewed on the same date, provided a complete registration statement has been filed prior to the general permit's expiration date.

All persons desiring to be covered by this general permit must register with the Department by filing a registration statement and applicable fees. The registration statement shall be submitted and a notification of coverage issued prior to any discharges or other activities for which this permit is required.

Concrete Products facilities that are discharging process wastewater and/or storm water associated with industrial activity to surface waters on the effective date of this general permit and which have not been issued an individual VPDES permit, are required to submit the registration statement. Existing operations with individual VPDES permits that wish to seek coverage under the proposed general permit would have to file a registration statement at least 180 days prior to the expiration date of the individual VPDES permit. For all new concrete products facilities that will have discharges of process wastewater or storm water associated with industrial activity and that will begin activities after the effective date of this permit, the registration statement shall be filed at least 30 days prior to the commencement of operation of the concrete plant.

This general permit does not cover activities or discharges covered by an individual VPDES permit until the individual permit has expired or has been revoked. Any person conducting an activity covered by an individual permit, which could be covered by this general permit, may request that the individual permit be revoked and register for coverage under this general permit. Antibacksliding will be considered prior to granting the coverage under this general permit. Any owner or operator not wishing to be covered or limited by this general permit may make application for an individual VPDES permit, in accordance with VPDES procedures, stating the reasons supporting the request. This general permit will not apply to any new or increased discharge that will result in significant effects to the receiving waters. The determination is made in accordance with the State Water Control Board's Antidegradation Policy contained in the Virginia Water Quality Standards, 9 VAC 25-260-30.

All facilities that the Department believes are eligible for coverage under this general permit will be authorized to discharge under the terms and conditions of the permit after a complete registration statement is submitted, the

May 6, 2008

applicable permit fee is paid and the Department sends a copy of the general permit to the applicant. If this general permit is inappropriate, the applicant will be so notified and the requirement that an individual permit or alternate general permit is needed will remain in effect.

STATS Program Output

4/22/03 7:58:45 AM

Facility = Ready-Mixed Concrete Plant

Chemical = TRC

Chronic averaging period = 4

WLAa = 0.019

WLAc = 0.011

Q.L. = 0.1

samples/mo. = 1

samples/wk. = 1

Summary of Statistics:

observations = 1

Expected Value = .1

Variance = .0036

C.V. = 0.6

97th percentile daily values = .243341

97th percentile 4 day average = .166379

97th percentile 30 day average = .120605

< Q.L. = 0

Model used = BPJ Assumptions, type 2 data

A limit is needed based on Chronic Toxicity

Maximum Daily Limit = 1.60883226245856E-02

Average Weekly limit = 1.60883226245856E-02

Average Monthly LImit = 1.60883226245856E-02

The data are:

0.1

ATTACHMENT C

Registration Statement and Instructions

**REGISTRATION STATEMENT FOR THE GENERAL VIRGINIA POLLUTANT DISCHARGE
ELIMINATION SYSTEM (VPDES) PERMIT FOR CONCRETE PRODUCTS FACILITIES**

1. APPLICANT INFORMATION

- A. Name of Facility: _____
- B. Facility Owner: _____
- C. Owner's Mailing Address
- a. Street or P.O. Box _____
- b. City or Town _____ c. State _____ d. Zip Code _____
- e. Phone Number _____
- f. Email address (if available, not required) _____
- g. Indicate if the applicant would like the permit to be transmitted electronically. Yes ____ No ____
- D. Facility Location: _____
(Street Number, Route Number, or Other Identifier)
- E. Is the operator of the facility also the owner? Yes ____ No ____ If "No", complete F & G.
- F. Name of Operator: _____
- G. Operator's Mailing Address
- a. Street or P.O. Box _____
- b. City or Town _____ c. State _____ d. Zip Code _____
- e. Phone Number _____
- f. Email address (if available, not required) _____

2. FACILITY INFORMATION

- A. Primary Standard Industrial Classification (SIC) Code: _____
Secondary SIC Codes: _____
- B. Nature of business: (provide a brief description) _____

- C. Is this a proposed or existing facility? _____
- Does this facility currently have a VPDES permit? Yes ____ No ____
- If yes, give permit number. _____
- Does this facility currently have a VPA permit? Yes ____ No ____
- If yes, give permit number. _____
- D. Describe any type of wastewater treatment or reuse/recycle system(s); identify any system(s) which operate only in a "no discharge" mode: _____

- If settling basins are used for treatment and control of process wastewater or process wastewater and commingled storm water, indicate the date of construction for all basins receiving the listed wastewater.

- Are these basins lined with concrete or any other impermeable materials? Yes ____ No ____

REGISTRATION STATEMENT FOR GENERAL VPDES PERMIT
CONCRETE PRODUCTS FACILITIES

Page 2

E. Are there vehicle/equipment maintenance or repair activities on site?

Yes ____ No ____

If yes, is there any process wastewater generated from these activities? Yes ____ No ____

F. Will this facility discharge non-contact cooling water from a geothermal unit or other system?

Yes ____ No ____ If "Yes", describe the source of non-contact cooling water _____

G. Are any chemical additives used in the geothermal or other system which discharges non-contact cooling water? Yes ____ No ____ If "Yes", complete a, b, c and d.

a. List the chemical additive to be employed and its purpose; _____

b. Give the proposed schedule and quantity of chemical usage, and the estimated concentration in the discharge; _____

c. Describe any wastewater treatment or retention (if any) to be provided during the use of the additives; _____ and

d. Attach a Material Safety Data Sheet (MSDS) and available aquatic toxicity information for each additive proposed for use.

H. Describe any measures employed to reclaim, reuse or dispose of the waste concrete materials.

3. **FACILITY DRAWING**

Attach a schematic drawing showing the source(s) of water used on the property, the industrial operations contributing to or using water, and the conceptual design of the methods of treatment and disposal of wastewater and solids.

4. **MAP**

Attach a topographic map extending to at least one mile beyond property boundary. The map must show the outline of the facility, and the location of each of its existing and proposed intake and discharge points. Include all springs, rivers and other surface water bodies.

5. **DISCHARGE INFORMATION**

A. List all discharge outfalls by a number that is the same as on the map required in Question 4. Identify the processes which discharge through each outfall. Give the latitude, longitude (if available) and name of the waterbody receiving the discharge.

Outfall No.	Operation (Process)	Latitude/Longitude	Receiving Stream
-------------	---------------------	--------------------	------------------

_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____

REGISTRATION STATEMENT FOR GENERAL VPDES PERMIT
CONCRETE PRODUCTS FACILITIES

Page 3

B. Estimate the flow in gallons per day (gpd) and identify the duration and frequency of the discharge for each separate discharge point:

Outfall No.	Daily Flow (gpd) Maximum / Average	Hours/Day	Days/Week
-------------	---------------------------------------	-----------	-----------

_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____

6. **STORM WATER POLLUTION PREVENTION PLAN**

If your facility is a proposed one, as identified under Item 2.C, and includes storm water outfall(s), as identified under Item 5.A above, has a Storm Water Pollution Prevention Plan been prepared? Yes ____ No ____

7. **CERTIFICATION**

"I hereby grant to duly authorized agents of the Department of Environmental Quality, upon presentation of credentials, permission to enter the property where the treatment works is located for the purpose of determining compliance with or the suitability of coverage under the General Permit. I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system or those persons directly responsible for gathering the information, the information submitted is to the best of my knowledge and belief true, accurate, and complete. I am aware that there are significant penalties for submitting false information including the possibility of fine and imprisonment for knowing violations."

Signature: _____ Date: _____

Name of person signing above: _____
(printed or typed)

Title: _____

REQUIRED ATTACHMENTS:

1. MSDS and available aquatic toxicity information for chemical additives used in cooling systems (if applicable, 2 F and 2 G above).
2. Facility Drawing
3. Topographic Map

For Department use only:

Accepted/Not Accepted by: _____ Date: _____

Basin _____ Stream Class _____ Section _____

Special Standards _____

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INSTRUCTION FOR COMPLETING THE REGISTRATION STATEMENT FOR THE GENERAL VPDES PERMIT FOR CONCRETE PRODUCTS FACILITIES (VAG11)

WHO MUST FILE THE REGISTRATION STATEMENT

This registration statement must be completed and submitted by any concrete products facilities requesting coverage under the above general permit for process wastewater discharges and/or regulated storm water discharges.

WHERE TO FILE THE REGISTRATION STATEMENT

The completed registration statement with original signature, a copy of the fee form, and a copy of your check for the appropriate fee should be sent to the Department of Environmental Quality Regional Office for your area. The original fee form and the original check should be sent to Receipts Control at the DEQ's Richmond Office. The address to send the fee form and the check is provided in the Fee Form Instructions. The Regional Office for your area depends on the county in which the discharge is located. Regional office addresses can be obtained from our website at www.deq.virginia.gov, or by calling the DEQ at (804) 698-4000.

COMPLETENESS

Complete all items except where indicated, or enter NA for "not applicable" in order for your registration statement to be accepted. If you need more space than the form allows, write on and attach extra sheets of paper.

DEFINITIONS

SIC Code mean the "Standard Industrial Classification" code listed in the Federal Office of Management and Budget (OMB) SIC Manual, 1987. SIC codes are used as identifiers of industries with certain characteristics. The SIC code for Concrete Block and Brick Facilities is 3271, the SIC Code for Concrete Products Facilities, Except Block and Brick is 3272, the SIC Code for Ready-Mixed Concrete Plants is 3273.

Storm water, for the purposes of this form, means storm water runoff that is regulated by the EPA and State storm water regulations. It refers to the runoff during storms that may come into contact with raw materials, products or waste materials from concrete products facilities.

Process wastewater is water that was used in the processing of concrete products, such as truck washout, truck wash-off, central mixer washout, washing of transport buckets, forms or other equipment, and non-contact cooling water from geothermal systems or other such systems. Process wastewater can also be generated from engine steam cleaning in the vehicle/equipment maintenance shop. Domestic sewage discharges are not covered by this general permit.

LINE BY LINE INSTRUCTIONS

Item 1. APPLICANT INFORMATION

- Item A: Provide the name of the concrete products facility here.
- Item B: Provide the name of the person or corporation that owns the business. This does not have to be the owner of the building (e.g., if it is leased) but should be who is responsible for the business and wants coverage under the general permit.
- Item C: Provide the mailing address and phone number of the above person. Provide email (this is not required but helpful for future methods of communication).
- Item D: Indicate here the physical location of the facility if it can't be located from the mailing address.

- Item E: If someone other than the owner listed in item B runs the plant and is the person with whom business will be conducted, check **No**. Otherwise check **Yes**.
- Item F: If **No** was checked above, indicate the name of the person other than the owner who operates the facility.
- Item G: Provide the address and phone number of the person other than the owner here.

Item 2. FACILITY INFORMATION

- Item A: Provide the facility's primary and secondary SIC Codes. This general permit will cover a facility or portions of a facility where the primary purpose is classified as SIC Code 3271, 3272 or 3273. This general permit does not exclude coverage for a concrete products facility with a secondary industrial activity co-located on site as long as the secondary activity does not generate any point source discharge.
- Item B: Provide a brief description of the process activities. If the facility is a ready-mixed concrete plant, indicate if the plant is permanent or portable.
- Item C: Provide permit number for any valid VPDES permit or VPA permit/No Discharge Certificate held by the facility.
- Item D: Describe the type(s) of wastewater treatment employed, including reuse/recycle system(s). Identify any system(s) which operates only in a "no discharge" mode. Also identify the date of construction and liner installation of the settling basins. All settling basins that were constructed on or after February 2, 1998 are required to be lined with concrete or any other impermeable materials prior to commencing operation. DEQ requires that liners have a maximum coefficient of permeability of 1×10^{-6} cm/sec. It is recommended that soil used as liners be capable of achieving a maximum coefficient of permeability of 1×10^{-7} cm/sec or less. Total soil liner thickness should be one foot after compaction of two separate lifts of equal thickness. Synthetic liners are not recommended due to their tendency of puncture. If concrete is used, a minimum thickness of one foot reinforced concrete is recommended.
- Item E: Identify if there are any vehicle/equipment maintenance activities on site. This includes equipment repair and maintenance (oil changes, etc...) and activities such as engine steam cleaning. Also indicate if there are any process wastewaters produced as a result of these activities.
- Item F: Indicate if the facility discharges any cooling water from a geothermal unit or other system. Also describe the source of the cooling water if applicable.
- Item G: The use of any chemical additives, except chlorine, without prior approval is prohibited under this general permit. You should list all chemicals currently used or anticipated to use within the life of the permit term on the registration statement. Prior approval shall be obtained from the DEQ before any changes are made to the chemical usage in the geothermal or other system. The MSDS and available aquatic toxicity information for each additive used may be obtained from the manufacturer of the chemical additives.
- Item H: Describe measures used by the facility to reclaim, reuse or dispose of the waste concrete materials. The general permit restricts waste concrete reclamation to a designated area and prohibits any untreated discharge from this area to surface water.

Item 3: FACILITY DRAWING

A schematic drawing should show the source(s) of water used for production, the industrial operations contributing to or using water, and the conceptual design of the methods of treatment and disposal of wastewater and solid materials (such as solids from the settling basins and waste concrete materials). If a liner is installed in the settling basin(s), the drawing should reflect its specifications.

Item 4: MAP

Map should be legible and of sufficient scale to show the required features with the site boundaries clearly marked.

Item 5: DISCHARGE INFORMATION

List all discharge outfalls by a number, such as 001, 002, etc. Provide latitude and longitude if available. Daily flow has been moved from 5A to 5B. Discharge to the receiving stream may be through a municipal separate storm sewer system. In such cases, identify the receiving stream with a footnote recognizing the owner of the municipal separate storm sewer system which the outfall discharges through.

Item 6: STORM WATER POLLUTION PREVENTION PLAN

For proposed facilities including storm water outfall(s), a Storm Water Pollution Prevention Plan shall be prepared and implemented on or before the date of submission of the registration statement.

Item 7: CERTIFICATION

All registration statement shall be signed as follows:

1. For a corporation: by a responsible corporate officer. For the purpose of this section, a responsible corporate officer means: (i) A president, secretary, treasurer, or vice-president of the corporation in charge of a principal business function, or any other person who performs similar policy- or decision-making functions for the corporation, or (ii) the manager of one or more manufacturing, production, or operating facilities provided the manager is authorized to make management decisions which govern the operation of the regulated facility including having the explicit or implicit duty of making major capital investment recommendations, and initiating and directing other comprehensive measures to assure long term environmental compliance with environmental laws and regulations; the manager can ensure that the necessary systems are established or actions taken to gather complete and accurate information for permit application requirements; and where authority to sign documents has been assigned or delegated to the manager in accordance with corporate procedures;
2. For a partnership or sole proprietorship: by a general partner or the proprietor, respectively; or
3. For a municipality, state, federal, or other public agency: By either a principal executive officer or ranking elected official. For purposes of this section, a principal executive officer of a federal agency includes: (i) The chief executive officer of the agency, or (ii) a senior executive officer having responsibility for the overall operations of a principal geographic unit of the agency.

ATTACHMENT D

General VPDES Permit Pages

General Permit No: VAG11
Effective Date: October 1, 2008
Expiration Date: September 30, 2013
GENERAL PERMIT FOR CONCRETE
PRODUCTS FACILITIES AUTHORIZATION TO
DISCHARGE UNDER THE VIRGINIA POLLUTANT
DISCHARGE ELIMINATION SYSTEM AND THE VIRGINIA
STATE WATER CONTROL LAW

In compliance with the provisions of the Clean Water Act, as amended, and pursuant to the State Water Control Law and regulations adopted pursuant thereto, owners of concrete products facilities are authorized to discharge to surface waters within the boundaries of the Commonwealth of Virginia, except those specifically named in board regulations or policies which prohibit such discharges.

The authorized discharge shall be in accordance with this cover page, Part I-Effluent Limitations, Monitoring Requirements, and Special Conditions, Part II-Storm Water Management, and Part III-Conditions Applicable to All VPDES Permits, as set forth herein.

Part I. Effluent Limitations and Monitoring Requirements.

A. Effluent limitations and monitoring requirements.

1. Process wastewater.

During the period beginning on the permit's effective date and lasting until the permit's expiration date, the permittee is authorized to discharge process wastewater which may contain input from vehicle/equipment maintenance activities, and may be commingled with noncontact cooling water or storm water associated with industrial activity. Samples taken in compliance with the monitoring requirements specified below shall be taken at outfall(s).

Such discharges shall be limited and monitored by the permittee as specified below:

EFFLUENT CHARACTERISTICS	DISCHARGE LIMITATIONS			MONITORING REQUIREMENTS	
	Average	Maximum	Minimum	Frequency	Sample Type
Flow (MGD)	NL	NL	NA	⁽⁶⁾	Estimate
Total Suspended Solids (mg/l)	30	60	NA	⁽⁶⁾	Grab
pH (standard units)	NA	9.0 ⁽¹⁾	6.0 ⁽¹⁾	⁽⁶⁾	Grab
Total Petroleum Hydrocarbons ⁽²⁾ (mg/l)	NA	15	NA	1/3 Months	Grab
Total Residual Chlorine ⁽³⁾ (mg/l)	0.016	0.016	NA	⁽⁶⁾	Grab
Ammonia-N ⁽³⁾ (mg/l)	NA	NL	NA	⁽⁶⁾	Grab
Temperature ⁽⁴⁾ (°C)	NA	⁽⁵⁾	NA	⁽⁶⁾	Immersion Stabilization

NL = No limitation, monitoring required

NA = Not applicable

⁽¹⁾ Where the Water Quality Standards (9 VAC 25-260) establish alternate standards for pH in the waters receiving the discharge, those standards shall be the maximum and minimum effluent limitations.

⁽²⁾ Total Petroleum Hydrocarbons limitation and monitoring are only required where a discharge contains process wastewater generated from the vehicle/equipment maintenance activities. Total Petroleum Hydrocarbons shall be analyzed using the Wisconsin Department of Natural Resources Modified Diesel Range Organics Method as specified in Wisconsin publication SW-141 (1995), or by EPA SW-846 Method 8015C for diesel range organics, or by EPA SW-846 Method 8270D. If Method 8270D is used, the lab must report the combination of diesel range organics and polynuclear aromatic hydrocarbons.

⁽³⁾ Chlorine limitation and monitoring are only required where the discharge contains cooling water that is chlorinated. Ammonia monitoring is only required where the discharge contains cooling water that is disinfected using chloramines.

⁽⁴⁾ Temperature limitation and monitoring are only required where a discharge contains cooling water.

⁽⁵⁾ The effluent temperature shall not exceed a maximum 32°C for discharges to nontidal coastal and piedmont waters, 31°C for mountain and upper piedmont waters, 21°C for put and take trout waters, or 20°C for natural trout waters. No maximum temperature limit applies to discharges to estuarine waters.

For estuarine waters, nontidal coastal and piedmont waters, mountain and upper piedmont waters, and put and take trout waters, the effluent shall not cause an increase in temperature of the receiving stream of more than 3°C above the natural water temperature. For natural trout waters, the temperature of the effluent shall not cause an increase of 1°C above natural water temperature. The effluent shall not cause the temperature in the receiving stream to change more than 2°C per hour, except in the case of natural trout waters where the hourly temperature change shall not exceed 0.5°C.

Natural temperature is defined as that temperature of a body of water (measured as the arithmetic average over one hour) due solely to natural conditions without the influence of any point-source discharge.

⁽⁶⁾ For a facility that was covered by the previous general permit, and reduced monitoring was granted and compliance demonstrated, monitoring frequency shall be 1/quarter. In all other cases, monitoring frequency shall be 1/month in the first year of permit coverage. If the first year results demonstrate full compliance with the effluent limitations and the permittee receives authorization from the DEQ regional office, monitoring frequency shall be reduced to 1/quarter. Should the permittee be issued a warning letter related to violation of effluent limitations, a notice of violation, or be the subject of an active enforcement action, monitoring frequency shall revert to 1/month, upon issuance of the letter or notice or initiation of the enforcement action and remain in effect until the permit's expiration date. Reports of quarterly monitoring shall be submitted to the DEQ regional office no later than the 10th day of April, July, October, and January.

Part I. Effluent Limitations And Monitoring Requirements.

A. Effluent limitations and monitoring requirements.

2. Noncontact cooling water.

During the period beginning on the permit's effective date and lasting until the permit's expiration date, the permittee is authorized to discharge noncontact cooling water. Samples taken in compliance with the monitoring requirements specified below shall be taken at outfall(s).

Such discharges shall be limited and monitored by the permittee as specified below:

EFFLUENT CHARACTERISTICS	DISCHARGE LIMITATIONS			MONITORING REQUIREMENTS	
	Average	Maximum	Minimum	Frequency	Sample Type
Flow (MGD)	NL	NL	NA	(4)	Estimate
pH (standard units)	NA	9.0 ⁽¹⁾	6.0 ⁽¹⁾	(4)	Grab
Total Residual Chlorine ⁽²⁾ (mg/l)	0.016	0.016	NA	(4)	Grab
Ammonia-N ⁽²⁾ (mg/l)	NA	NL	NA	(4)	Grab
Temperature (°C)	NA	(3)	NA	(4)	Immersion Stabilization

NL = No limitation, monitoring required

NA = Not applicable

⁽¹⁾ Where the Water Quality Standards (9 VAC 25-260) establish alternate standards for pH in the waters receiving the discharge, those standards shall be the maximum and minimum effluent limitations.

⁽²⁾ Chlorine limitation and monitoring are only required where the source of cooling water is chlorinated. Ammonia monitoring is only required where cooling water is disinfected using chloramines.

⁽³⁾ The effluent temperature shall not exceed a maximum 32°C for discharges to nontidal coastal and piedmont waters, 31°C for mountain and upper piedmont waters, 21°C for put and take trout waters, or 20°C for natural trout waters. No maximum temperature limit applies to discharges to estuarine waters. For estuarine waters, nontidal coastal and piedmont waters, mountain and upper piedmont waters, and put and take trout waters, the effluent shall not cause an increase in temperature of the receiving stream of more than 3°C above the natural water temperature. For natural trout waters, the temperature of the effluent shall not cause an increase of 1°C above natural water temperature. The effluent shall not cause the temperature in the receiving stream to change more than 2°C per hour, except in the case of natural trout waters where the hourly temperature change shall not exceed 0.5°C. Natural temperature is defined as that temperature of a body of water (measured as the arithmetic average over one hour) due solely to natural conditions without the influence of any point-source discharge.

⁽⁴⁾ For a facility that was covered by the previous general permit, and reduced monitoring was granted and compliance demonstrated, monitoring frequency shall be 1/quarter. In all other cases, monitoring frequency shall be 1/month in the first year of permit coverage. If the first year results demonstrate full compliance with the effluent limitations and the permittee receives authorization from the DEQ regional office, monitoring frequency shall be reduced to 1/quarter. Should the permittee be issued a warning letter related to violation of effluent limitations, a notice of violation, or be the subject of an active enforcement action, monitoring frequency shall be reverted to 1/month, upon issuance of the letter or notice or initiation of the enforcement action and remain in effect until the permit's expiration date. Reports of quarterly monitoring shall be submitted to the DEQ regional office no later than the 10th day of April, July, October, and January.

Part I. Effluent Limitations And Monitoring Requirements.

A. Effluent limitations and monitoring requirements.

3. Storm water associated with industrial activity - storm event monitoring.

During the period beginning on the permit's effective date and lasting until the permit's expiration date, the permittee is authorized to discharge storm water associated with industrial activity which does not combine with other process wastewaters or noncontact cooling water prior to discharge. Samples taken in compliance with the monitoring requirements specified below shall be taken at outfall(s).

Such discharges shall be limited and monitored by the permittee as specified below:

EFFLUENT CHARACTERISTICS	DISCHARGE LIMITATIONS		MONITORING REQUIREMENTS	
	Maximum	Minimum	Frequency	Sample Type
Flow (MGD)	NL	NA	1/Year	Estimate ⁽¹⁾
Total Petroleum Hydrocarbons ⁽³⁾ (mg/l)	NL	NA	1/Year	Grab ⁽²⁾
Total Suspended Solids (mg/l)	NL	NA	1/Year	Grab ⁽²⁾
Total Recoverable Iron (mg/l)	NL	NA	1/Year	Grab ⁽²⁾
pH (standard units)	NL	NL	1/Year	Grab ⁽²⁾

NL = No limitation, monitoring required

NA = Not applicable

⁽¹⁾ Estimate of the total volume of the discharge during the storm event in accordance with the Operation and Maintenance Manual.

⁽²⁾ The grab sample shall be taken during the first 30 minutes of the discharge. If during the first 30 minutes it was impracticable, then a grab sample shall be taken during the first hour of discharge, and the permittee shall submit with the Discharge Monitoring Report a description of why a grab sample during the first 30 minutes was impracticable.

⁽³⁾ Total Petroleum Hydrocarbons shall be analyzed using the Wisconsin Department of Natural Resources Modified Diesel Range Organics Method as specified in Wisconsin publication SW-141 (1995), or by EPA SW-846 Method 8015C for diesel range organics, or by EPA SW-846 Method 8270D. If Method 8270D is used, the lab must report the combination of diesel range organics and polynuclear aromatic hydrocarbons.

4. All storm water samples shall be collected from the discharge resulting from a storm event that is greater than 0.1 inches in magnitude and that occurs at least 72 hours from the previously measurable (greater than 0.1 inch rainfall) storm event. Specific storm event data shall be reported with the Discharge Monitoring Report in accordance with Part II A.

5. Reports of annual monitoring shall be submitted to the DEQ regional office no later than the 10th day of January of each year.

6. A quarterly visual monitoring shall be performed and recorded in accordance with Part II D.

B. Special conditions.

1. There shall be no discharge of floating solids or visible foam in other than trace amounts. There shall be no solids deposition in surface water as a result of the industrial activity in the vicinity of the outfall.

2. Except as expressly authorized by this permit, no product, materials, industrial wastes, or other wastes resulting from the purchase, sale, mining, extraction, transport, preparation, or storage of raw or intermediate materials, final product, byproduct or wastes, shall be handled, disposed of, or stored so as to permit a discharge of such product, materials, industrial wastes, or other wastes to surface waters.

3. Vehicles and equipment utilized during the industrial activity on a site must be operated and maintained in such a manner as to minimize the potential or actual point source pollution of surface waters. Fuels, lubricants, coolants, and hydraulic fluids, or any other petroleum products, shall not be disposed of by discharging on the ground or into surface waters. Spent fluids shall be disposed of in a manner so as not to enter the surface or ground waters of the state and in accordance with the applicable state and federal disposal regulations. Any spilled fluids shall be cleaned up to the maximum extent practicable and disposed of in a manner so as not to allow their entry into the surface or ground waters of the state.

4. All washdown and washout of trucks, mixers, transport buckets, forms or other equipment shall be conducted within designated washdown and washout areas. All washout/washdown water shall be collected for recycle or treated prior to discharge.

5. Any waste concrete and dredged solids from the settling basins shall be managed within a designated area, and any wastewaters including storm water generated from these activities shall be collected for recycle or treated prior to discharge.

6. No domestic sewage discharges to surface waters are permitted under this general permit.

7. For geothermal or other system which discharges noncontact cooling water, the use of any chemical additives, except chlorine, without prior approval is prohibited under this general permit. Prior approval shall be obtained from the DEQ Regional Office before any changes are made to the chemical usage in the geothermal or other system. Requests for approval of chemical use shall be made in writing and shall include the following information:

- a. The chemical additive to be employed and its purpose;
- b. The proposed schedule and quantity of chemical usage, and the estimated concentration in the discharge;
- c. The wastewater treatment or retention (if any) to be provided during the use of the additive; and
- d. A Material Safety Data Sheet (MSDS) and available aquatic toxicity information for each additive proposed for use.

8. Within 180 days after the date of coverage under this general permit, the permittee shall develop an Operations and Maintenance (O&M) Manual for the permitted facility. The O&M Manual shall include procedures and practices for the mitigation of pollutant discharges and for the protection of state waters from the facility's operations. The manual shall address, at a minimum, operations and maintenance practices for the wastewater treatment process units and chemical and material storage areas, solids management and disposal procedures, temporary and long-term facility closure plans, testing requirements and procedures, recordkeeping and reporting requirements and the duties and roles of responsible officials.

The permittee shall implement the O&M Manual procedures and practices as soon as possible but no later than 12 months after the date of coverage under this general permit. The manual shall be kept on site at the permitted facility and shall be made available to the department upon request.

For a facility that was covered by the previous permit, an O&M Manual was required to be developed and implemented for that facility. Within 90 days after the date of coverage under this general permit, the existing O&M Manual shall be reviewed and modified, as appropriate, to

conform to the requirements of this permit. The existing O&M Manual shall continue to be implemented until the manual, if required, is revised and implemented.

9. If the concrete products facility discharges through a municipal separate storm sewer system to surface waters, the permittee shall, within 30 days of coverage under this general permit, notify the owner of the municipal separate storm sewer system of the existence of the discharge and provide the following information: the name of the facility; a contact person and phone number; nature of the discharge; number of the outfalls; and the location of the discharge. A copy of such notification shall be provided to the department.

10. The permittee shall ensure that all basins and lagoons maintain a minimum freeboard of one foot at all times except during a 72-hour transition period after a measurable rainfall event. During the 72-hour transition period, no discharge from the basins and lagoons shall occur unless it is in accordance with this permit. Within 72 hours after a measurable rainfall event, the freeboard in all basins and lagoons shall return to the minimum freeboard of one foot. Where basins are operated in a series mode of operation, the one foot freeboard requirement for the upper basins may be waived provided the final basin will maintain the freeboard requirements of this special condition. Should the one-foot freeboard not be maintained, the permittee shall immediately notify the DEQ Regional Office, describe the problem and corrective measures taken to correct the problem. Within five days of notification, the permittee shall submit a written statement to the regional office of explanation and corrective measures taken. In order to demonstrate compliance, the permittee shall conduct daily inspections while the facility is in operation and maintain an inspection log. The inspection log shall include at least the date and time of inspection, the weather data including the occurrence of a measurable rainfall event, the printed name and the handwritten signature of the inspector, the freeboard measurement in inches, a notation of observation made, and any corrective measures, if appropriate, taken. The log shall be kept onsite and be made available to the department upon request.

11. For treatment systems which operate only in a "no discharge" mode, there shall be no discharge of pollutants to surface waters from these systems except in the case of a storm event which is greater than a 25 year-24 hour storm event. The operation of these systems shall not contravene the Water Quality Standards (9VAC25-260), as adopted and amended by the board, or any provision of the State Water Control Law.

12. The permittee shall notify the department as soon as he knows or has reason to believe:

a. That any activity has occurred or will occur which would result in the discharge, on a routine or frequent basis, of any toxic pollutant which is not limited in this permit if that discharge will exceed the highest of the following notification levels:

(1) One hundred micrograms per liter (100 µg/l);

(2) Two hundred micrograms per liter (200 µg/l) for acrolein and acrylonitrile; five hundred micrograms per liter (500 µg/l) for 2,4-dinitrophenol and for 2-methyl-4,6-dinitrophenol; and one milligram per liter (1 mg/l) for antimony;

(3) Five times the maximum concentration value reported for that pollutant in the permit application; or

(4) The level established by the board in accordance with 9VAC25-31-220 F.

b. That any activity has occurred or will occur which would result in any discharge, on a nonroutine or infrequent basis, of a toxic pollutant which is not limited in this permit if that discharge will exceed the highest of the following notification levels:

(1) Five hundred micrograms per liter (500 µg/l);

(2) One milligram per liter (1 mg/l) for antimony;

(3) Ten times the maximum concentration value reported for that pollutant in the permit application; or

(4) The level established by the board in accordance with 9VAC25-31-220 F.

13. All settling basins used for treatment and control of process wastewater or process wastewater and commingled storm water that were constructed on or after February 2, 1998, shall be lined with concrete or any other impermeable materials.

14. Treated wastewater may be used on site for the purposes of dust suppression. Dust suppression shall be carried out as a best management practice but not a wastewater disposal method. No ponding or surface runoff shall occur as a result of such activity.

15. Compliance reporting under Part I A.

a. The quantification levels (QL) shall be as follows:

Effluent Characteristic	Quantification Level
Chlorine	0.10 mg/l
Ammonia-N	0.20 mg/l

b. Reporting.

(1) Monthly Average. Compliance with the monthly average limitations and/or reporting requirements for the parameters listed in Part I A shall be determined as follows: All concentration data below the QL listed in subsection 15 a of this subsection shall be treated as zero. All concentration data equal to or above the QL listed shall be treated as it is reported. An arithmetic average shall be calculated using all reported data, including the defined zeros, for the month. This arithmetic average shall be reported on the DMR as calculated. If all data are below the QL then the average shall be reported as "<QL". If reporting for quantity is required on the DMR and the calculated concentration is <QL then report "<QL" for the quantity, otherwise use the calculated concentration.

(2) Daily Maximum. Compliance with the daily maximum limitations and/or reporting requirements for the parameters listed in Part I A shall be determined as follows: All concentration data below the QL listed in subdivision 15 a of this subsection shall be treated as zero. All concentration data equal to or above the QL shall be treated as reported. An arithmetic average of the values shall be calculated using all reported data, including the defined zeros, collected for each day during the reporting month. The maximum value of these daily averages thus determined shall be reported on the DMR as the Daily Maximum. If all data are below the QL then the average shall be reported as "<QL". If reporting for quantity is required on the DMR and the calculated concentration is <QL then report "<QL" for the quantity, otherwise use the calculated concentration.

(3) Any single datum required shall be reported as "<QL" if it less than QL listed in subdivision 15 a of this subsection. Otherwise the numerical value shall be reported.

(4) The permittee shall report at least two significant digits for a given parameter. Regardless of the rounding convention used (i.e. 5 always rounding up or to the nearest even number) by the permittee, the permittee shall use the convention consistently and shall ensure that consulting laboratories employed by the permittee use the same convention.

Part II.
Storm Water Management.

A. Recording of results. For each discharge measurement or sample taken pursuant to the storm event monitoring requirements of this permit, the permittee shall record and report with the Discharge Monitoring Reports (DMRs) the following information:

1. The date and duration (in hours) of the storm event(s) sampled;
2. The rainfall measurements or estimates (in inches) of the storm event which generated the sampled discharge; and
3. The duration between the storm event sampled and the end of the previous measurable (greater than 0.1 inch rainfall) storm event.

B. Representative discharge. When a facility has two or more exclusively storm water outfalls that, based on a consideration of industrial activity, significant materials, and management practices and activities within the area drained by the outfall, the permittee reasonably believes discharge substantially identical effluent, the permittee may test the effluent of one of such outfalls and include with the DMRs an explanation that the quantitative data also applies to the substantially identical outfalls provided that the permittee includes a description of the location of the outfalls and explains in detail why the outfalls are expected to discharge substantially identical effluent. In addition, for each exclusively storm water outfall that the permittee believes is representative, an estimate of the size of the drainage area (in square feet) and an estimate of the runoff coefficient of the drainage area (e.g., low (under 40%), medium (40% to 65%) or high (above 65%)) shall be provided.

C. Sampling waiver. When a permittee is unable to collect storm water samples required in Part I A or other applicable sections of this permit within a specified sampling period due to adverse climatic conditions, the permittee shall collect a substitute sample from a separate qualifying event in the next period and submit these data along with the data for the routine sample in that period. Adverse weather conditions which may prohibit the collection of samples include weather conditions that create dangerous conditions for personnel (such as local flooding, high winds, hurricane, tornadoes, electrical storms, etc.) or otherwise make the collection of a sample impracticable (drought, extended frozen conditions, etc.).

D. Quarterly visual examination of storm water quality. The permittee shall perform and document a visual examination of a storm water discharge associated with industrial activity from each outfall, except discharges exempted below. The visual examination(s) must be made during daylight hours (e.g., normal working hours), at least once in each of the following three-month periods: January through March, April through June, July through September, and October through December.

1. Examinations shall be made of samples collected within the first 30 minutes (or as soon thereafter as practical, but not to exceed one hour) of when the runoff or snowmelt begins discharging. The examination shall document observations of color, odor, clarity, floating solids, settled solids, suspended solids, foam, oil sheen, and other obvious indicators of storm water pollution. The examination must be conducted in a well lit area. No analytical tests are required to be performed on the samples. All such samples shall be collected from the discharge resulting from a storm event that is greater than 0.1 inches in magnitude and that occurs at least 72 hours from the previous measurable (greater than 0.1 inch rainfall) storm event. The required 72-hour storm event interval is waived where the preceding measurable storm event did not result in a measurable discharge from the facility. The required 72-hour storm event interval may also be waived where the permittee documents that less than a 72-hour interval is representative for local storm events during the season when sampling is being conducted. If no qualifying storm event resulted in discharge from the facility during a monitoring period, visual monitoring is exempted provided that the permittee document that no qualifying storm event occurred that resulted in storm water discharge during that quarter. Where practicable, the same individual should carry out the collection and examination of discharges for the entire permit term.

2. Visual examination reports must be maintained onsite with the pollution prevention plan. The report shall include the outfall location, the examination date and time, examination personnel, the nature of the discharge (i.e., runoff or snow melt), visual quality of the storm water discharge (including observations of color, odor, clarity, floating solids, settled solids, suspended solids, foam, oil sheen, and other obvious indicators of storm water pollution), visual quality of the

receiving stream (including observations of solids deposition and oil sheen from the industrial activity) in the vicinity of the outfall (including ditches and conveyances) and probable sources of any observed storm water contamination.

3. If the facility has two or more outfalls that, based on a consideration of industrial activity, significant materials, and management practices and activities within the area drained by the outfall, the permittee reasonably believes discharge substantially identical effluents, the permittee may collect a sample of effluent of one of such outfalls and report that the examination data also applies to the substantially identical outfall(s) provided that the permittee includes in the storm water pollution prevention plan a description of the location of the outfalls and explains in detail why the outfalls are expected to discharge substantially identical effluents. In addition, for each outfall that the permittee believes is representative, an estimate of the size of the drainage area (in square feet) and an estimate of the runoff coefficient of the drainage area (i.e., low (under 40%), medium (40 to 65%), or high (above 65%)) shall be provided in the plan.

4. When the permittee is unable to conduct the visual examination due to adverse climatic conditions, the permittee must document the reason for not performing the visual examination and retain this documentation onsite with the records of the visual examinations. Adverse weather conditions that may prohibit the collection of samples include weather conditions that create dangerous conditions for personnel (such as local flooding, high winds, hurricane, tornadoes, electrical storms, etc.) or otherwise make the collection of a sample impracticable (drought, extended frozen conditions, etc.).

E. Allowable nonstorm water discharges.

1. The following nonstorm water discharges are authorized by this permit provided the nonstorm water component of the discharge is in compliance with Part II E 2 below.

- a. Discharges from fire fighting activities;
- b. Fire hydrant flushings;
- c. Potable water including water line flushings;
- d. Uncontaminated air conditioning or compressor condensate;
- e. Irrigation drainage;
- f. Landscape watering provided all pesticides, herbicides, and fertilizer have been applied in accordance with manufacturer's instructions;
- g. Pavement wash waters where no detergents are used and no spills or leaks of toxic or hazardous materials have occurred (unless all spilled material has been removed);
- h. Routine external building wash down which does not use detergents;
- i. Uncontaminated ground water or spring water;
- j. Foundation or footing drains where flows are not contaminated with process materials such as solvents;
- k. Incidental windblown mist from cooling towers that collects on rooftops or adjacent portions of the facility, but NOT intentional discharges from the cooling tower (e.g., "piped" cooling tower blowdown or drains).

2. Except for flows from fire fighting activities, the Storm Water Pollution Prevention Plan must include:

- a. Identification of each allowable nonstorm water source;
- b. The location where it is likely to be discharged; and
- c. Descriptions of appropriate BMPs for each source.

3. If mist blown from cooling towers is included as one of the allowable nonstorm water discharges, the facility must specifically evaluate the potential for the discharges to be contaminated by chemicals used in the cooling tower. The permittee must determine that the levels of such chemicals in the discharges will not cause or contribute to a violation of an applicable water quality standard after implementation of the BMPs selected to control such discharges.

F. Releases of hazardous substances or oil in excess of reportable quantities. The discharge of hazardous substances or oil in the storm water discharge(s) from this facility shall be prevented or minimized in accordance with the applicable storm water pollution prevention plan for the facility. This permit does not authorize the discharge of hazardous substances or oil resulting from an onsite spill. Where a release containing a hazardous substance or oil in an amount equal to or in excess of a reportable quantity established under either 40 CFR Part 110 (1998), 40 CFR Part 117 (1998) or 40 CFR Part 302 (1998) occurs during a 24-hour period, the permittee is required to notify the department in accordance with the requirements of Part III G as soon as he has knowledge of the discharge. Where a release enters a municipal separate storm sewer system (MS4), the permittee shall also notify the owner of the MS4. In addition, the storm water pollution prevention plan required by this permit must be reviewed to identify measures to prevent the reoccurrence of such releases and to respond to such releases, and the plan must be modified where appropriate. This permit does not relieve the permittee of the reporting requirements of 40 CFR Part 110 (1998), 40 CFR Part 117 (1998) and 40 CFR Part 302 (1998) or §62.1-44.34:19 of the Code of Virginia.

G. Storm water pollution prevention plans. A storm water pollution prevention plan is required to be developed for the facility. The plan shall be prepared in accordance with good engineering practices, and shall identify potential sources of pollution which may reasonably be expected to affect the quality of storm water discharges associated with industrial activity from the facility. In addition, the plan shall describe and ensure the implementation of practices which are to be used to reduce the pollutants in storm water discharges associated with industrial activity at the facility and to assure compliance with the terms and conditions of this permit. Permittees must implement the provisions of the storm water pollution prevention plan as a condition of this permit.

The storm water pollution prevention plan requirements of this permit may be fulfilled by incorporating by reference other plans or documents such as an erosion and sediment control plan, a spill prevention control and countermeasure (SPCC) plan developed for the facility under §311 of the Clean Water Act or best management practices (BMP) programs otherwise required for the facility provided that the incorporated plan meets or exceeds the plan requirements of Part II G 4. If an erosion and sediment control plan is being incorporated by reference, it shall have been approved by the locality in which the activity is to occur or by another appropriate plan approving authority authorized under the Virginia Erosion and Sediment Control Regulation, 4VAC50-30. All plans incorporated by reference into the storm water pollution prevention plan become enforceable under this permit.

1. Deadlines for plan preparation and compliance.

- a. For a storm water discharge associated with industrial activity that is existing on or before the effective date of this permit, the storm water pollution prevention plan shall be prepared and implemented as expeditiously as practicable, but not later than 270 days from the date of coverage under this permit. For a facility that was covered by the previous permit, a storm water pollution prevention plan was required to be developed and implemented for that facility. Within 120 days after the date of coverage under this permit, the existing storm water pollution prevention plan shall be reviewed and modified, as appropriate, to conform to the requirements of this permit. The existing storm water pollution prevention plans shall continue to be implemented until a new plan, if required, is developed and implemented.
- b. The plan for any facility where industrial activity commences after the effective date of this permit, and except as provided elsewhere in this permit, shall be prepared, implemented and provide for compliance with the terms of the plan and this permit on or before the date of submission of a registration statement to be covered under this permit.
- c. In cases where construction is necessary to implement measures required by the plan, the plan shall contain a schedule that provides compliance with the plan as expeditiously as practicable, but no later than three years from the date of coverage under this permit. Where a construction compliance schedule is included in the plan, the schedule shall include appropriate nonstructural and/or temporary controls to be implemented in the affected portion(s) of the facility prior to completion of the permanent control measure.

2. Signature and plan review.

- a. The plan shall be signed in accordance with Part III K, and be retained on-site at the facility covered by this permit in accordance with Part III B.

- b. The permittee shall make the storm water pollution prevention plan, annual site compliance inspection report, or other information available to the department upon request.
- c. The director, or his designee, may notify the permittee in writing at any time that the plan does not meet one or more of the minimum requirements of this part. Such notification shall identify those provisions of the permit which are not being met by the plan, and identify which provisions of the plan require modifications in order to meet the minimum requirements of this part. Within 60 days of such notification from the director, or as otherwise provided by the director, the permittee shall make the required changes to the plan and shall submit to the department a written certification that the requested changes have been made.
3. Keeping plans current. The permittee shall amend the plan whenever there is a change in design, construction, operation, or maintenance, which has a significant effect on the potential for the discharge of pollutants to surface waters of the state or if the storm water pollution prevention plan proves to be ineffective in eliminating or significantly minimizing pollutants from sources identified under Part II G 4 b of this permit, or in otherwise achieving the general objectives of controlling pollutants in storm water discharges associated with industrial activity.
4. Contents of plan. The plan shall include, at a minimum, the following items:
- a. Pollution prevention team. Each plan shall identify a specific individual or individuals within the facility organization as members of a storm water pollution prevention team that are responsible for developing the storm water pollution prevention plan and assisting the facility or plant manager in its implementation, maintenance, and revision. The plan shall clearly identify the responsibilities of each team member. The activities and responsibilities of the team shall address all aspects of the facility's storm water pollution prevention plan.
- b. Description of potential pollutant sources. Each plan shall provide a description of potential sources which may reasonably be expected to add significant amounts of pollutants to storm water discharges or which may result in the discharge of pollutants during dry weather from separate storm sewers draining the facility. Each plan shall identify all activities and significant materials which may potentially be significant pollutant sources. Each plan shall include, at a minimum:
- (1) Drainage. A site map indicating an outline of the portions of the drainage area of each storm water outfall that are within the facility boundaries, each existing structural control measure to reduce pollutants in storm water runoff, surface water bodies, locations where significant materials are exposed to precipitation, locations where major spills or leaks identified under Part II G 4 b (3) have occurred, and the locations of the following activities: fueling stations; vehicle and equipment maintenance and/or cleaning areas; loading/unloading areas; bag house or other dust control device, recycle/sedimentation pond, clarifier or other device used for the treatment of process wastewater, and the areas that drain to the treatment device, locations used for the storage or disposal of wastes; liquid storage tanks; processing areas; and storage areas. The map must indicate the outfall locations and the types of discharges contained in the drainage areas of the outfalls; and for each area of the facility that generates storm water discharges associated with industrial activity with a reasonable potential for containing significant amounts of pollutants, a prediction of the direction of flow, and an identification of the types of pollutants which are likely to be present in storm water discharges associated with industrial activity. Factors to consider include the toxicity of the chemicals; quantity of chemicals used, produced or discharged; the likelihood of contact with storm water; and history of significant leaks or spills of toxic or hazardous pollutants. Flows with a significant potential for causing erosion shall be identified.
- (2) Inventory of exposed materials. An inventory of the types of materials handled at the site that potentially may be exposed to precipitation. Such inventory shall include a narrative description of significant materials that have been handled, treated, stored or disposed in a manner to allow exposure to storm water between the time of three years prior to the date of coverage under this general permit and the present; method and location of on-site storage or disposal; materials management practices employed to minimize contact of materials with storm water runoff between the time of three years prior to the date of coverage under this general permit and the present; the location and a description of existing structural and

nonstructural control measures to reduce pollutants in storm water runoff; and a description of any treatment the storm water receives.

(3) Spills and leaks. A list of significant spills and significant leaks of toxic or hazardous pollutants that occurred at areas that are exposed to precipitation or that otherwise drain to a storm water conveyance at the facility after the date of three years prior to the date of coverage under this general permit. Such list shall be updated as appropriate during the term of the permit.

(4) Sampling data. A summary of existing discharge sampling data describing pollutants in storm water discharges from the facility, including a summary of sampling data collected during the term of this permit.

(5) Risk identification and summary of potential pollutant sources. A narrative description of the potential pollutant sources from the following activities: loading and unloading operations; outdoor storage activities; outdoor manufacturing or processing activities; significant dust or particulate generating processes; and on-site waste disposal practices. The description shall specifically list any significant potential source of pollutants at the site and for each potential source, any pollutant or pollutant parameter (e.g., biochemical oxygen demand, etc.) of concern shall be identified.

c. Measures and controls. Each facility covered by this permit shall develop a description of storm water management controls appropriate for the facility, and implement such controls. The appropriateness and priorities of controls in a plan shall reflect identified potential sources of pollutants at the facility. The description of storm water management controls shall address the following minimum components, including a schedule for implementing such controls:

(1) Good housekeeping. Good housekeeping requires the clean and orderly maintenance of areas that may contribute pollutants to storm waters discharges. Particular attention should be paid to areas where raw materials are stockpiled, material handling areas, storage areas, liquid storage tanks and loading/unloading areas. The plan shall describe procedures performed to minimize the discharge of: spilled cement, aggregate (including sand and gravel), fly ash, settled dust, or other significant material in storm water from paved portions of the site that are exposed to storm water. Regular sweeping or other equivalent measures to minimize the presence of these materials shall be employed. The frequency of sweeping or equivalent measures shall be specified in the plan based upon a consideration of the amount of industrial activity occurring in the areas and the frequency of precipitation, but it shall be a minimum of once a week if cement, aggregate, kiln dust, fly ash or settled dust are being handled/processed. Where practicable, efforts must be made to prevent the exposure of fine granular solids (cement, fly ash, etc.) to storm water by storing these materials in enclosed silos/hoppers, buildings or under other covering.

(2) Preventive maintenance. A preventive maintenance program shall involve timely inspection and maintenance of storm water management devices (e.g., cleaning oil/water separators, catch basins) inspecting and testing facility equipment and systems to uncover conditions that could cause breakdowns or failures resulting in discharges of pollutants to surface waters, and appropriate maintenance of such equipment and systems.

(3) Spill prevention and response procedures. Areas where potential spills which can contribute pollutants to storm water discharges can occur, and their accompanying drainage points shall be identified clearly in the storm water pollution prevention plan. Where appropriate, specifying material handling procedures, storage requirements, and use of equipment such as diversion valves in the plan should be considered. Procedures for cleaning up spills shall be identified in the plan and made available to the appropriate personnel. The necessary equipment to implement a clean up should be available to personnel.

(4) Routine facility inspections. Facility personnel who are familiar with the industrial activity, the BMPs and the storm water pollution prevention plan shall be identified to inspect designated equipment and areas of the facility. Inspections shall be conducted while the facility is in operation and include, but are not limited to, the following areas exposed to storm

water: material handling areas, above ground storage tanks, hoppers or silos, dust collection/containment systems, and truck wash down/equipment cleaning areas. The inspection frequency shall be specified in the plan based on a consideration of the level of industrial activity at the facility, but it shall be a minimum of quarterly unless more frequent intervals are specified elsewhere in the permit. A set of tracking or followup procedures shall be used to ensure that appropriate actions are taken in response to the inspections. Records of inspections shall be maintained with the pollution prevention plan.

(5) Employee training. Employee training programs shall inform personnel responsible for implementing activities identified in the storm water pollution prevention plan or otherwise responsible for storm water management at all levels of responsibility of the components and goals of the storm water pollution prevention plan. Training should address topics such as spill response, good housekeeping and material management practices. A pollution prevention plan shall identify periodic dates for such training.

(6) Recordkeeping and internal reporting procedures. A description of incidents such as spills, or other discharges, along with other information describing the quality and quantity of storm water discharges shall be included in the plan. Inspections and maintenance activities shall be documented and records of such activities shall be incorporated into the plan.

(7) Sediment and erosion control. The plan shall identify areas which, due to topography, activities, or other factors, have a high potential for significant soil erosion, and identify structural, vegetative, and/or stabilization measures to be used to limit erosion.

(8) Management of runoff. The plan shall contain a narrative consideration of the appropriateness of traditional storm water management practices (practices other than those which control the generation or source(s) of pollutants) used to divert, infiltrate, reuse, or otherwise manage storm water runoff in a manner that reduces pollutants in storm water discharges from the site. The plan shall provide that measures that the permittee determines to be reasonable and appropriate shall be implemented and maintained. The potential of various sources at the facility to contribute pollutants to storm water discharges associated with industrial activity shall be considered when determining reasonable and appropriate measures. Appropriate measures may include: vegetative swales and practices, reuse of collected storm water (such as for a process or as an irrigation source), inlet controls (such as oil/water separators), snow management activities, infiltration devices, wet detention/retention devices; or other equivalent measures.

d. Comprehensive site compliance evaluation. Qualified facility personnel who are familiar with the industrial activity, the BMPs and the storm water pollution prevention plan shall conduct site compliance evaluations at appropriate intervals specified in the plan, but, in no case less than once a year. Such evaluations shall include the following:

(1) Areas contributing to a storm water discharge associated with industrial activity shall be visually inspected for evidence of, or the potential for, pollutants entering the drainage system. Measures to reduce pollutant loadings shall be evaluated to determine whether they are adequate and properly implemented in accordance with the terms of the permit or whether additional control measures are needed. Structural storm water management measures, sediment and erosion control measures, and other structural pollution prevention measures identified in the plan shall be observed to ensure that they are operating correctly. A visual inspection of equipment needed to implement the plan, such as spill response equipment, shall be made.

(2) Based on the results of the evaluation, the description of potential pollutant sources identified in the plan in accordance with Part II G 4 b and pollution prevention measures and controls identified in the plan in accordance with Part II G 4 c shall be revised as appropriate within two weeks of such evaluation and shall provide for implementation of any changes to the plan in a timely manner, but in no case more than 12 weeks after the evaluation.

(3) A report summarizing the scope of the inspection, personnel making the inspection, the date(s) of the inspection, major observations relating to the implementation of the storm water pollution prevention plan, and actions taken in accordance with Part II G 4 d shall be made and retained as part of the storm water pollution prevention plan as required in Part III B. The

report shall identify any incidents of noncompliance. Where a report does not identify any incidents of noncompliance, the report shall contain a certification that the facility is in compliance with the storm water pollution prevention plan and this permit. The report shall be signed in accordance with Part III K.

(4) Where compliance evaluation schedules overlap with inspections required under Part II G 4 c (4), the compliance evaluation may be conducted in place of one such inspection.

5. Special pollution prevention plan requirements:

a. Additional requirements for storm water discharges associated with industrial activity from facilities subject to §313 of the Emergency Planning and Community Right-to-Know Act of 1986 (EPCRA) reporting requirements. Potential pollutant sources for which the facility has reporting requirements under EPCRA 313 must be identified in the summary of potential pollutant sources as per Part II G 4 b.

b. Additional requirements for salt storage. Storage piles of salt used for deicing or other commercial or industrial purposes must be enclosed or covered to prevent exposure to precipitation (except for exposure resulting from adding or removing materials from the pile). Piles do not need to be enclosed or covered where storm water from the pile is not discharged to surface waters or the discharges from the piles are authorized under another permit.

Part III.
Conditions Applicable To All VPDES Permits.

A. Monitoring.

1. Samples and measurements taken as required by this permit shall be representative of the monitored activity.
2. Monitoring shall be conducted according to procedures approved under 40 CFR Part 136 or alternative methods approved by the U.S. Environmental Protection Agency unless other procedures have been specified in this permit.
3. The permittee shall periodically calibrate and perform maintenance procedures on all monitoring and analytical instrumentation at intervals that will ensure accuracy of measurements.

B. Records.

1. Records of monitoring information shall include:
 - a. The date, exact place, and time of sampling or measurements;
 - b. The individuals who performed the sampling or measurements;
 - c. The dates and times analyses were performed;
 - d. The individuals who performed the analyses;
 - e. The analytical techniques or methods used; and
 - f. The results of such analyses.
2. Except for records of monitoring information required by this permit related to the permittee's sewage sludge use and disposal activities, which shall be retained for a period of at least five years, the permittee shall retain (i) records of all monitoring information including all calibration and maintenance records and all original strip chart recordings for continuous monitoring instrumentation, (ii) copies of all reports required by this permit, and (iii) records of all data used to complete the registration statement for this permit for a period of at least three years from the date of the sample, measurement, report or request for coverage. This period of retention shall be extended automatically during the course of any unresolved litigation regarding the regulated activity or regarding control standards applicable to the permittee, or as requested by the board.

C. Reporting monitoring results.

1. The permittee shall submit the results of the monitoring required by this permit not later than the 10th day of the month after monitoring takes place, unless another reporting schedule is specified elsewhere in this permit. Monitoring results shall be submitted to the department's regional office.
2. Monitoring results shall be reported on a Discharge Monitoring Report (DMR) or on forms provided, approved or specified by the department.
3. If the permittee monitors any pollutant specifically addressed by this permit more frequently than required by this permit using test procedures approved under 40 CFR Part 136 or using other test procedures approved by the U.S. Environmental Protection Agency or using procedures specified in this permit, the results of this monitoring shall be included in the calculation and reporting of the data submitted in the DMR or reporting form specified by the department.
4. Calculations for all limitations which require averaging of measurements shall utilize an arithmetic mean unless otherwise specified in this permit.

D. Duty to provide information. The permittee shall furnish to the department, within a reasonable time, any information which the board may request to determine whether cause exists for modifying, revoking and reissuing, or terminating this permit or to determine compliance with this permit. The board may require the permittee to furnish, upon request, such plans, specifications, and other pertinent information as may be necessary to determine the effect of the wastes from his discharge on the quality of state waters, or such other information as may be necessary to accomplish the purposes of the State Water Control Law. The permittee shall also furnish to the department upon request copies of records required to be kept by this permit.

E. Compliance schedule reports. Reports of compliance or noncompliance with, or any progress reports on, interim and final requirements contained in any compliance schedule of this permit shall be submitted no later than 14 days following each schedule date.

F. Unauthorized discharges. Except in compliance with this permit, or another permit issued by the board, it shall be unlawful for any person to:

1. Discharge into state waters sewage, industrial wastes, other wastes, or any noxious or deleterious substances; or
2. Otherwise alter the physical, chemical or biological properties of such state waters and make them detrimental to the public health, or to animal or aquatic life, or to the use of such waters for domestic or industrial consumption, for recreation, or for other uses.

G. Reports of unauthorized discharges. Any permittee who discharges or causes or allows a discharge of sewage, industrial waste, other wastes or any noxious or deleterious substance into or upon state waters in violation of Part III F; or who discharges or causes or allows a discharge that may reasonably be expected to enter state waters in violation of Part III F, shall notify the department of the discharge immediately upon discovery of the discharge, but in no case later than 24 hours after said discovery. A written report of the unauthorized discharge shall be submitted to the department, within five days of discovery of the discharge. The written report shall contain:

1. A description of the nature and location of the discharge;
2. The cause of the discharge;
3. The date on which the discharge occurred;
4. The length of time that the discharge continued;
5. The volume of the discharge;
6. If the discharge is continuing, how long it is expected to continue;
7. If the discharge is continuing, what the expected total volume of the discharge will be; and
8. Any steps planned or taken to reduce, eliminate and prevent a recurrence of the present discharge or any future discharges not authorized by this permit.

Discharges reportable to the department under the immediate reporting requirements of other regulations are exempted from this requirement.

H. Reports of unusual or extraordinary discharges. If any unusual or extraordinary discharge including a bypass or upset should occur from a treatment works and the discharge enters or could be expected to enter state waters, the permittee shall promptly notify, in no case later than 24 hours, the department by telephone after the discovery of the discharge. This notification shall provide all available details of the incident, including any adverse affects on aquatic life and the known number of fish killed. The permittee shall reduce the report to writing and shall submit it to the department within five days of discovery of the discharge in accordance with Part III I 2. Unusual and extraordinary discharges include but are not limited to any discharge resulting from:

1. Unusual spillage of materials resulting directly or indirectly from processing operations;
2. Breakdown of processing or accessory equipment;
3. Failure or taking out of service some or all of the treatment works; and
4. Flooding or other acts of nature.

I. Reports of noncompliance. The permittee shall report any noncompliance which may adversely affect state waters or may endanger public health.

1. An oral report shall be provided within 24 hours from the time the permittee becomes aware of the circumstances. The following shall be included as information which shall be reported within 24 hours under this subdivision:
 - a. Any unanticipated bypass; and
 - b. Any upset which causes a discharge to surface waters.
2. A written report shall be submitted within five days and shall contain:
 - a. A description of the noncompliance and its cause;

- b. The period of noncompliance, including exact dates and times, and if the noncompliance has not been corrected, the anticipated time it is expected to continue; and
- c. Steps taken or planned to reduce, eliminate, and prevent reoccurrence of the noncompliance.

The board may waive the written report on a case-by-case basis for reports of noncompliance under Part III I if the oral report has been received within 24 hours and no adverse impact on state waters has been reported.

3. The permittee shall report all instances of noncompliance not reported under Parts III I 1 or 2, in writing, at the time the next monitoring reports are submitted. The reports shall contain the information listed in Part III I 2.

NOTE: The immediate (within 24 hours) reports required in Parts III G, H and I may be made to the department's regional office by telephone or by fax. For reports outside normal working hours, leave a message and this shall fulfill the immediate reporting requirement. For emergencies, the Virginia Department of Emergency Services maintains a 24 hour telephone service at 1-800-468-8892.

J. Notice of planned changes.

- 1. The permittee shall give notice to the department as soon as possible of any planned physical alterations or additions to the permitted facility. Notice is required only when:
 - a. The permittee plans alteration or addition to any building, structure, facility, or installation from which there is or may be a discharge of pollutants, the construction of which commenced:
 - (1) After promulgation of standards of performance under §306 of Clean Water Act which are applicable to such source; or
 - (2) After proposal of standards of performance in accordance with §306 of Clean Water Act which are applicable to such source, but only if the standards are promulgated in accordance with §306 within 120 days of their proposal;
 - b. The alteration or addition could significantly change the nature or increase the quantity of pollutants discharged. This notification applies to pollutants which are subject neither to effluent limitations nor to notification requirements specified elsewhere in this permit; or
 - c. The alteration or addition results in a significant change in the permittee's sludge use or disposal practices, and such alteration, addition, or change may justify the application of permit conditions that are different from or absent in the existing permit, including notification of additional use or disposal sites not reported during the permit application process or not reported pursuant to an approved land application plan.
- 2. The permittee shall give advance notice to the department of any planned changes in the permitted facility or activity which may result in noncompliance with permit requirements.

K. Signatory requirements.

- 1. Registration statements. All registration statements shall be signed as follows:
 - a. For a corporation: by a responsible corporate officer. For the purpose of this section, a responsible corporate officer means (i) president, secretary, treasurer, or vice-president of the corporation in charge of a principal business function, or any other person who performs similar policy- or decision-making functions for the corporation or (ii) the manager of one or more manufacturing, production, or operating facilities provided the manager is authorized to make management decisions that govern the operation of the regulated facility including having the explicit or implicit duty of making major capital investment recommendations, and initiating and directing other comprehensive measures to assure long-term environmental compliance with environmental laws and regulations; the manager can ensure that the necessary systems are established or actions taken to gather complete and accurate information for permit application requirements; and where if authority to sign documents has been assigned or delegated to the manager in accordance with corporate procedures;
 - b. For a partnership or sole proprietorship: by a general partner or the proprietor, respectively; or

- c. For a municipality, state, federal, or other public agency: by either a principal executive officer or ranking elected official. For purposes of this section, a principal executive officer of a public agency includes (i) the chief executive officer of the agency or (ii) a senior executive officer having responsibility for the overall operations of a principal geographic unit of the agency.
2. Reports, etc. All reports required by permits, and other information requested by the board shall be signed by a person described in Part III K 1, or by a duly authorized representative of that person. A person is a duly authorized representative only if:
- a. The authorization is made in writing by a person described in Part III K 1;
 - b. The authorization specifies either an individual or a position having responsibility for the overall operation of the regulated facility or activity such as the position of plant manager, operator of a well or a well field, superintendent, position of equivalent responsibility, or an individual or position having overall responsibility for environmental matters for the company. A duly authorized representative may thus be either a named individual or any individual occupying a named position; and
 - c. The written authorization is submitted to the department.
3. Changes to authorization. If an authorization under Part III K 2 is no longer accurate because a different individual or position has responsibility for the overall operation of the facility, a new authorization satisfying the requirements of Part III K 2 shall be submitted to the department prior to or together with any reports, or information to be signed by an authorized representative.
4. Certification. Any person signing a document under Parts III K 1 or 2 shall make the following certification:

"I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations."

L. Duty to comply. The permittee shall comply with all conditions of this permit. Any permit noncompliance constitutes a violation of the State Water Control Law and the Clean Water Act, except that noncompliance with certain provisions of this permit may constitute a violation of the State Water Control Law but not the Clean Water Act. Permit noncompliance is grounds for enforcement action; for permit termination, revocation and reissuance, or modification; or denial of a permit renewal application.

The permittee shall comply with effluent standards or prohibitions established under §307(a) of the Clean Water Act for toxic pollutants and with standards for sewage sludge use or disposal established under §405(d) of the Clean Water Act within the time provided in the regulations that establish these standards or prohibitions or standards for sewage sludge use or disposal, even if this permit has not yet been modified to incorporate the requirement.

M. Duty to reapply. If the permittee wishes to continue an activity regulated by this permit after the expiration date of this permit, the permittee shall apply for and obtain a new permit. All permittees with a currently effective permit shall submit a new application at least 180 days before the expiration date of the existing permit, unless permission for a later date has been granted by the board. The board shall not grant permission for applications to be submitted later than the expiration date of the existing permit.

N. Effect of a permit. This permit does not convey any property rights in either real or personal property or any exclusive privileges, nor does it authorize any injury to private property or invasion of personal rights, or any infringement of federal, state or local law or regulations.

O. State law. Nothing in this permit shall be construed to preclude the institution of any legal action under, or relieve the permittee from any responsibilities, liabilities, or penalties established pursuant to any other state law or regulation or under authority preserved by §510 of the Clean Water Act. Except as provided in permit conditions on "bypassing" (Part III U), and "upset" (Part III V) nothing in this permit shall be construed to relieve the permittee from civil and criminal penalties for noncompliance.

P. Oil and hazardous substance liability. Nothing in this permit shall be construed to preclude the institution of any legal action or relieve the permittee from any responsibilities, liabilities, or penalties to which the permittee is or may be subject under §§62.1-44.34:14 through 62.1-44.34:23 of the State Water Control Law.

Q. Proper operation and maintenance. The permittee shall at all times properly operate and maintain all facilities and systems of treatment and control (and related appurtenances) which are installed or used by the permittee to achieve compliance with the conditions of this permit. Proper operation and maintenance also includes effective plant performance, adequate funding, adequate staffing, and adequate laboratory and process controls, including appropriate quality assurance procedures. This provision requires the operation of back-up or auxiliary facilities or similar systems which are installed by the permittee only when the operation is necessary to achieve compliance with the conditions of this permit.

R. Disposal of solids or sludges. Solids, sludges or other pollutants removed in the course of treatment or management of pollutants shall be disposed of in a manner so as to prevent any pollutant from such materials from entering state waters.

S. Duty to mitigate. The permittee shall take all reasonable steps to minimize or prevent any discharge or sludge use or disposal in violation of this permit which has a reasonable likelihood of adversely affecting human health or the environment.

T. Need to halt or reduce activity not a defense. It shall not be a defense for a permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit.

U. Bypass.

1. "Bypass" means the intentional diversion of waste streams from any portion of a treatment facility. The permittee may allow any bypass to occur which does not cause effluent limitations to be exceeded, but only if it also is for essential maintenance to assure efficient operation. These bypasses are not subject to the provisions of Parts III U 2 and U 3.

2. Notice.

a. Anticipated bypass. If the permittee knows in advance of the need for a bypass, prior notice shall be submitted, if possible at least 10 days before the date of the bypass.

b. Unanticipated bypass. The permittee shall submit notice of an unanticipated bypass as required in Part III I.

3. Prohibition of bypass.

a. Bypass is prohibited, and the board may take enforcement action against a permittee for bypass, unless:

(1) Bypass was unavoidable to prevent loss of life, personal injury, or severe property damage;

(2) There were no feasible alternatives to the bypass, such as the use of auxiliary treatment facilities, retention of untreated wastes, or maintenance during normal periods of equipment downtime. This condition is not satisfied if adequate back-up equipment should have been installed in the exercise of reasonable engineering judgment to prevent a bypass which occurred during normal periods of equipment downtime or preventive maintenance; and

(3) The permittee submitted notices as required under Part III U 2.

b. The board may approve an anticipated bypass, after considering its adverse effects, if the board determines that it will meet the three conditions listed above in Part III U 3 a.

V. Upset.

1. An upset constitutes an affirmative defense to an action brought for noncompliance with technology based permit effluent limitations if the requirements of Part III V 2 are met. A determination made during administrative review of claims that noncompliance was caused by upset, and before an action for noncompliance, is not a final administrative action subject to judicial review.

2. A permittee who wishes to establish the affirmative defense of upset shall demonstrate, through properly signed, contemporaneous operating logs, or other relevant evidence that:
 - a. An upset occurred and that the permittee can identify the causes of the upset;
 - b. The permitted facility was at the time being properly operated;
 - c. The permittee submitted notice of the upset as required in Part III I; and
 - d. The permittee complied with any remedial measures required under Part III S.
3. In any enforcement proceeding the permittee seeking to establish the occurrence of an upset has the burden of proof.

W. Inspection and entry. The permittee shall allow the director, or his designee, upon presentation of credentials and other documents as may be required by law, to:

1. Enter upon the permittee's premises where a regulated facility or activity is located or conducted, or where records must be kept under the conditions of this permit;
2. Have access to and copy at reasonable times any records that must be kept under the conditions of this permit;
3. Inspect at reasonable times any facilities, equipment (including monitoring and control equipment), practices, or operations regulated or required under this permit; and
4. Sample or monitor at reasonable times, for the purposes of assuring permit compliance or as otherwise authorized by the Clean Water Act and the State Water Control Law, any substances or parameters at any location.

For purposes of this section, the time for inspection shall be deemed reasonable during regular business hours, and whenever the facility is discharging. Nothing contained herein shall make an inspection unreasonable during an emergency.

X. Permit actions. Permits may be modified, revoked and reissued, or terminated for cause. The filing of a request by the permittee for a permit modification, revocation and reissuance, or termination, or a notification of planned changes or anticipated noncompliance does not stay any permit condition.

Y. Transfer of permits.

1. Permits are not transferable to any person except after notice to the department. Except as provided in Part III Y 2, a permit may be transferred by the permittee to a new owner or operator only if the permit has been modified or revoked and reissued, or a minor modification made, to identify the new permittee and incorporate such other requirements as may be necessary under the State Water Control Law and the Clean Water Act.
2. As an alternative to transfers under Part III Y 1, this permit may be automatically transferred to a new permittee if:
 - a. The current permittee notifies the department at least 30 days in advance of the proposed transfer of the title to the facility or property;
 - b. The notice includes a written agreement between the existing and new permittees containing a specific date for transfer of permit responsibility, coverage, and liability between them; and
 - c. The board does not notify the existing permittee and the proposed new permittee of its intent to modify or revoke and reissue the permit. If this notice is not received, the transfer is effective on the date specified in the agreement mentioned in Part III Y 2 b.

Z. Severability. The provisions of this permit are severable, and if any provision of this permit or the application of any provision of this permit to any circumstance is held invalid, the application of such provision to other circumstances, and the remainder of this permit, shall not be affected thereby.

ATTACHMENT E

Registration Statement Transmittal Letter

Transmittal Letter
Concrete Products Facilities General Permit Registration Statement

Regional Letterhead

Facility Name
Address

ATTN: John Contact

RE: Registration for the General VPDES Permit (VAG11) for Concrete Products Facilities

Dear Mr. Contact:

The General VPDES permit regulation for Concrete Products Facilities was adopted by the State Water Control Board on April 10, 2008 and became effective on June 11, 2008. This general permit provides VPDES permit coverage to discharges from all qualified concrete products facilities that submit a registration statement and are approved for coverage. For those facilities that require permitting of their storm water discharges, this general permit will cover those discharges as well. Individual VPDES permit must complete and submit the enclosed registration statement if they wish to be covered under this general permit instead of an individual permit.

The attached registration must be submitted [**Choose One:** at least 180 days of the expiration date of an existing individual permit **OR** at least 30 days prior to commencing operation of a new process **OR** within 30 days* **OR** within X days**]. If your facility qualifies for the general permit, it is recommended that you obtain coverage in order to simplify requirements for having your process wastewater or storm water discharges permitted.

*[*Note: For 2008, we have waived the 180 day requirement. If 30 days is not a reasonable time period, then negotiate a time period with the permittee but before expiration.*

***Note: For non-permitted existing facilities, inform them of the requirement to obtain a permit, the consequences of discharging without permit coverage and set a time for submittal.]*

Instructions for completing the registration form are included in this package. The permit application fee for this general permit is \$600.00 and should be submitted in accordance with the attached fee form. [Download and attach most recent fee form from

<http://deqnet/documents/index.asp?path=%2Fdocs%2Fwater%2FWater%5Fpermit/Water%5FFee%5FForm>]

If you have any questions, please do not hesitate to contact us.

Sincerely,

Permit Writer

ATTACHMENT F

**Transmittal Letter for Issuing
General Permit Coverage**

**Transmittal Letter
Concrete Products Facilities General Permit**

Regional Letterhead

Facility Name
Address

ATTN: John Contact

RE: Coverage under the General VPDES Permit for Concrete Products Facilities VAG11_____

Dear Permittee:

We have reviewed your Registration Statement received on _____, and have determined that activities of the concrete products facility identified in the Registration Statement are hereby covered under the referenced general VPDES permit. Your coverage under this general permit becomes effective on October 1, 2008 or the date of this letter, whichever is later. The enclosed copy of the general permit contains the applicable effluent limitations, monitoring requirements and other conditions of coverage.

A Discharge Monitoring Report (DMR) for your [**Choose all that apply:** process wastewater / noncontact cooling water / storm water associated with an industrial activity] [is / are] included with the permit. [The / Each] DMR specifies the applicable effluent limitations, monitoring requirements and monitoring frequency (i.e., monthly, quarterly or yearly) contained in the permit. A DMR is to be completed for each permitted outfall and you will be responsible for obtaining additional copies of the DMR[s]. The DMR[s] [is / are] due on the tenth of the month following monitoring. For quarterly monitoring, the DMR[s] should be submitted by the tenth of January, April, July and October. For yearly monitoring, the DMR[s] should be submitted by the tenth of January 10. In accordance with the general permit, you are required to submit the DMR[s] to:

[Name of Regional Office and address]

Part I B.8 of the general permit requires that you develop and maintain an Operation and Maintenance (O&M) Manual for the permitted facility. [**For a new facility or facility previously covered under an individual permit:** This part of permit requires that you develop an O&M Manual within 180 days of permit coverage and implement the O&M Manual procedures within 12 months of permit coverage.] **OR** [**For a facility previously covered under this general permit only:** This part of permit requires that you review and modify, as appropriate, the existing O&M Manual within 90 days of permit coverage. The existing manual shall continue to be implemented until the manual, if required, is revised and implemented.]

This general permit constitutes coverage of your storm water discharges as required by the storm water regulations for your industry. Part II of the general permit pertains to these storm water discharges. [**For a new facility or facility previously covered under an individual permit:**

This part of the permit requires that you develop and implement a Storm Water Pollution Prevention Plan within 270 days of permit coverage.] **OR [For a facility previously covered under this general permit only:** This part of permit requires that you review and modify, as appropriate, the existing Storm Water Pollution Prevention Plan within 120 days of permit coverage. The existing plan shall continue to be implemented until a new plan, if required, is developed and implemented.]

The general permit will expire on October 1, 2013. The conditions of the permit require that you submit a new registration statement at least 180 days prior to that date if you wish continued coverage under the general permit, unless permission is granted to submit a new registration statement on a later date. Permission can not be granted to submit the registration statement after the expiration date of the permit.

If you have any questions, please do not hesitate to contact us.

Sincerely,

Permit Writer